DOCUMENT RESUME

ED 310 750 IR 013 951

AUTHOR	Riome, Carol-Anne, Comp.
TITLE	Computer Courseware Evaluations. January 1988 to December 1988. Volume VIII.
INSTITUTION	Alberta Dept. of Education, Edmonton. Curriculum Branch.
REPORT NO	ISBN-0-7732-0105-X
PUB DATE	89
NOTE	102p.; For the 1987 edition, see ED 295 612.
AVAILABLE FROM	Learning Resources Distributing Centre, 12360-142 Street, Edmonton, Alberta, Canada T5L 4X9.
PUB TYPE	Reports - Evaluative/Feasibility (142)
EDRS PRICE	MF01/PC05 Plus Postage.
DESCRIPTORS	*Business Education; Computer Literacy; *Computer Software Reviews; *Courseware; Elementary Secondary Education; Evaluation Methods; Foreign Countries; French; Information Retrieval; Language Arts; *Mathematics Instruction; *Microcomputers; Music Education; Problem Solving; *Word Processing
IDENTIFIERS	Alberta

ABSTRACT

The eighth in a series, this report reviews microcomputer software authorized by the Alberta (Canada) Department of Education from January 1988 through December 1988. This edition provides detailed evaluations of 40 authorized programs for teaching business education, computer literacy, databases, file management, French, information retrieval, keyboarding, language arts, life skills, logic, mathematics, music, problem solving, social studies, thinking skills, and word processing. Two of the programs are in French and English and one is in French. Both English and French subject indexes are provided, as well as an alphabetical index in which titles appear in the original language; evaluations are written in the language of the program. Each evaluation includes the program title; author(s); publisher; address; telephone number; grade level; topics; components; microcomputer compatibility (Apple IIe, Apple IIgs, IBM PC, and/or Macintosh); year produced; cost; subject area; and display language (English or French). Also included are descriptions and evaluations of content, instructional format, the technical system, technical characteristics, and documentation; the status of the program (basic, recommended, or supplementary); and purchase information. A summary of authorized courseware from January 1983 to December 1987 and lists of software unsuitable for authorization in 1988, software discontinued in 1988, and other print and electronic evaluation sources are also provided. (BBM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☑ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED310750

Computer Courseware Evaluations

JANUARY 1988 to DECEMBER 1988

Volume VIII

Curriculum

IR013951

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

S.Wolodko

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

BEST COPY AVAILABLE

Alberta EDUCATION

COMPUTER COURSEWARE EVALUATIONS

January 1988 to December 1988

Volume VIII

Curriculum Support Branch
Student Programs and Evaluation Division
Alberta Education

Copyright © 1989 by Alberta Education

Alberta Education Cataloguing in Publication Data

Alberta. Curriculum Support Branch
1. Computer courseware evaluations: January 1988 to December 1988.

ISBN 0-7732-0105-X

1. Computer programs — Evaluation. 2. Computer program — Reviews. 3. Computer-assisted instruction — Computer programs — Evaluation. 4. Micro-computers — Computer programs — Evaluation. I. Title.

LB1027.7.A333 1989 371.394'45

Copyright ©1989, the Crown in Right of Alberta, as represented by the Minister of Education. Alberta Education, 11160 Jasper Avenue, Edmonton, Alberta, T5K 0L2.

Permission is hereby given by the copyright owner for any person to reproduce this catalogue or any part thereof for educational purposes and on a non-profit basis.

Inquiries about this publication should be directed to the Coordinator, Resource Evaluation, Curriculum Support Branch, Alberta Education, 11160 Jasper Avenue, Edmonton, Alberta, Canada, T5K 0L2. Telephone: (403) 422-4872.

CONTENTS

ACKNOWLEDGMENTS iv

INTRODUCTION 1

USING THE CATALOGUE 2

ACQUIRING THE PRODUCTS 3

HOW TO ORDER ADDITIONAL COPIES OF THIS CATALOGUE 3

SUBJECT INDEX 5

FRENCH SUBJECT INDEX 10

TITLE INDEX 12

EVALUATION REPORTS (Resources Authorized January 1988 to December 1988) 13

NEW VERSIONS, FORMATS OR UPDATES OF PREVIOUSLY AUTHORIZED SOFTWARE ... 45

SUMMARY OF AUTHORIZED SOFTWARE (January 1983 to December 1988) 67

SOFTWARE UNSUITABLE FOR AUTHORIZATION (January 1988 to December 1988) 85

DISCONTINUED SOFTWARE (January 1988 to December 1988) 95

OTHER EVALUATION SOURCES

- PRINT SOURCES 101
- ELECTRONIC DATABASES 103

ACKNOWLEDGMENTS

Alberta Education acknowledges, with appreciation, the valuable contributions of the many teachers throughout Alberta who spent countless hours analysing computer software programs over the past 12 months.

Also, many thanks to Thérèse Pavone, project manager; Carol-Anne Riome for compiling and editing; Rosemarie Randall for proofreading; Mary Knox, Therese Pavone, Patricia Shields, Tara Boyd, Don McEachern and Gary Yakimchuk for their work on the synthesis reports and software summaries; the staff of the Xerox 6085 room for desktop publishing; and Barbara McCord and Virginia Durksen for editing.

INTRODUCTION

The Computer Courseware Evaluations Catalogue has been published since 1983 to assist Alberta educators in the purchase of software. Since 1982, a total of 247 software resources have been authorized by Alberta Education, including 19 basic, 47 recommended and 181 supplementary resources. The first catalogues (Volumes I to IV) were cumulative, containing new evaluation reports as well as all previous reports for Alberta authorized software. However, beginning in 1985 (Volume V), each catalogue includes reports for only software resources approved during the authorization period.

During the authorization period of the present catalogue (January 1988 to December 1988), 281 software resources were reviewed, but only 14.2% were authorized. These authorized materials represent a selection of software resources located over the past twelve months which best meet the needs of Alberta schools.

Resource evaluation is curriculum–driven. Only those software programs that fit the Alberta curriculum are subjected to the evaluation process. Alberta Education uses a three–stage process for the evaluation of each computer software product. First, a resource is evaluated by Alberta Education program managers to determine the fit with the Alberta curriculum. If the product is appropriate, it advances to a two–part analysis that evaluates its content and instructional design, as well as its adherence to tolerance and understanding criteria. Analysts are teachers who have been trained and tested in evaluation techniques and in the use of an evaluation instrument developed by the department. These analysts' reports are verified and synthesized by the Alberta Education Resource Evaluation Team. If the resource is recommended for approval, it advances to the final stage where it is assessed by Alberta Education's Curriculum Design, Curriculum Support or Language Services Branches. A decision is made on its status, using three designations: basic, recommended and supplementary. These are defined as follows:

Basic Learning Resources are those learning resources approved by Alberta Education as the most appropriate for meeting the majority of the goals and objectives of courses, or substantial components of courses, outlined in the provincial programs of studies,

AND,

those productivity software programs (e.g., word processors, spreadsheets, databases, integrated programs), approved by Alberta Education, that can be used to achieve important objectives across two or more grade levels, subject areas or programs.

Recommended Learning Resources are those learning resources approved by Alberta Education, that complement basic learning resources by making an important contribution to the attainment of one or more of the major goals of courses outlined in the provincial programs of studies, by enriching or reinforcing the learning experience.

Supplementary Learning Resources are those learning resources approved by Alberta Education because they support courses outlined in the provincial programs of studies by enriching or reinforcing the learning experience.

USING THE CATALOGUE

This publication is a listing of computer courseware evaluation reports. Each evaluation report is entered alphabetically, by title. A subject and title index are provided for convenient access to each report.

As indicated on the previous page, Alberta Education authorizes learning resources at **basic**, **recommended or supplementary** levels. It is important for readers, particularly those outside Alberta, to note that a major factor in the differentiation between these three levels is the amount of the Alberta curriculum that a product covers: one product may have a "lower" status than another because of the relatively limited scope of the Alberta curriculum objectives it supports.

Readers should also note that the designations used by Alberta Education are not equivalent to numerical scales or the summary phrases commonly used by other evaluation agencies. Developers of this guide have deliberately avoided summarizing products with a single phrase or a numerical total as readers may place undue emphasis on such entries which, by their nature, are incomplete and misleading. The courseware products described in this publication may have varying strengths and weaknesses; they have different objectives and different pedagogical strategies designed to achieve these objectives. To gain full appreciation of the quality of the contents, the full report must be read.

This publication is the eighth of its kind issued by Alberta Education.

A summary of all courseware authorized by Alberta Education for the period January 1983 to December 1988 has also been included. Grade level, resource status, location of the complete evaluation report and computer compatibility (Apple IIe, Apple IIgs, IBM PC, and/or MacIntosh) are provided. As well, a list has been included identifying software resources that were reviewed by the Alberta Education Resource Evaluation Team but were found to be unsuitable for authorized use in Alberta schools. Finally, a list has been attached indicating titles of authorized software that have been discontinued by the publishers.

ACQUIRING THE PRODUCTS

Sources for the products listed in this document are given at the end of each evaluation report. Although many of these products are available through the Learning Resources Distributing Centre (LRDC), courseware with a **supplementary** status may be more readily available through local distributors in your area. The following information is provided to clarify Alberta Education's present role in such acquisitions.

Products identified as **basic** or **recommended** learning resources are acquired and provided through the Learning Resources Distributing Centre, a branch of Alberta Education. Some products, such as "AppleWorks," are subsidized by Alberta Education so that schools may acquire these products at minimal cost. The Learning Resources Distributing Centre issues an annual catalogue of products containing pricing information, and schools should order materials using the required forms.

"MouseWrite" is now available to schools at no cost, as part of a licensing agreement negotiated by Alberta Education with the publisher. Public and separate schools contact their superintendents to acquire "MouseWrite." Private schools contact Alberta Education for this product.

The Learning Resources Distributing Centre also handles warranties and returns for microcomputer products. Please note that the principals purchasing officers are required to certify that the microcomputer products being purchased are for use by the school, and that the products' copyrights will be protected.

The majority of authorized microcomputer products falls within the category of **supplementary** learning resources. Schools can purchase such products through the Learning Resources Distributing Centre's special order process (please refer to the LRDC Buyer's Guide for special ordering procedures).

PLEASE NOTE: Prices are in Canadian dollars unless otherwise indicated.

HOW TO ORDER ADDITIONAL COPIES OF THIS CATALOGUE

Limited copies of this publication are provided without charge to educational institutions within Alberta. Schools wishing additional copies, or educators from outside the province wishing to acquire the catalogues, may purchase them from the Learning Resources Distributing Centre.

Learning Resources Distributing Centre
12360 – 142 Street
Edmonton, Alberta
T5L 4X9
Phone: (403) 427-2767

PLEASE NOTE: All orders must be accompanied by cheque or money order for $3.00 in Canadian Funds made payable to the LEARNING RESOURCES DISTRIBUTING CENTRE.

SUBJECT INDEX

For Software Resources Authorized January 1988 to December 1988

TITLE	GRADES	STATUS	PAGE
ACCOUNTING			
ACCPAC (Version 5.0)	10–12	Basic	15
Integrated Accounting (Ed. Version 3.23)	10–12	Basic	49
Simply Accounting (Ed. Version 1.03)	10–12	Basic	61
ADDITION			
Royal Rules, The	7–9	Supplementary	42
ALGEBRA			
Geometric PreSupposer, The: Points & Lines	7–9	Supplementary	25
Geometric Supposer, The: Quadrilaterals	7–9	Supplementary	26
Royal Rules, The	7–9	Supplementary	42
BUSINESS EDUCATION			
ACCPAC (Version 5.0)	10–12	Basic	15
AppleWorks (Version 2.1)	1–12	Basic	47
Bank Street Writer III	2–12	Recommended	18
Integrated Accounting (Ed. Version 3.23)	10–12	Basic	49
Microsoft Word (IBM Version 4.0)	10–12	Basic	55
Microsoft Word (Macintosh Version)	10–12	Basic	57
Reflex: The Analyst (Version 1.14)	10–12	Basic	59
Simply Accounting (Ed. Version 1.03)	10–12	Basic	61
WordPerfect (Apple IIe Version)	10–12	Basic	65
WordPerfect (Version 5.0)	10–12	Basic	63
COMPREHENSION			
Crossword Magic	2–12	Supplementary	22
COMPUTER LITERACY			
Microtype, The Wonderful World of Paws	1–6	Supplementary	32
DATABASES			
AppleWorks (Version 2.1)	1–12	Basic	47
Bank Street School Filer	4–9	Basic	16
Choices	10–12	Basic	20
Life Choices Simulation	10–12	Basic	27
Reflex: The Analyst (Version 1.14)	10–12	Basic	59
DIVIDING			
Royal Rules, The	7–9	Supplementary	42
FILE MANAGEMENT			
ACCPAC (Version 5.0)	10–12	Basic	15
AppleWorks (Version 2.1)	1–12	Basic	47
Bank Street School Filer	4–9	Basic	16
Integrated Accounting (Ed. Version 3.23)	10–12	Basic	49
Reflex: The Analyst (Version 1.14)	10–12	Basic	59
Simply Accounting (Ed. Version 1.03)	10–12	Basic	61

SUBJECT INDEX

For Software Resources Authorized January 1988 to December 1988

TITLE	GRADES	STATUS	PAGE
GAME FORMAT			
Crosscountry Canada	5	Recommended	21
Crossword Magic	2–12	Supplementary	22
Discover the World	5	Supplementary	23
Quest for Canada	5	Supplementary	41
Stickybear Town Builder	2	Recommended	44
GEOMETRY			
Geometric PreSupposer, The: Points & Lines	7–9	Supplementary	25
Geometric Supposer, The: Quadrilaterals	7–9	Supplementary	26
GRAPHING			
Geometric PreSupposer, The: Points & Lines	7–9	Supplementary	25
Geometric Supposer, The: Quadrilaterals	7–9	Supplementary	26
INFORMATION RETRIEVAL			
AppleWorks (Version 2.1)	1–12	Basic	47
Bank Street School Filer	4–9	Basic	16
Choices	10–12	Basic	20
Life Choices Simulation	10–12	Basic	27
Reflex: The Analyst (Version 1.14)	10–12	Basic	59
KEYBOARDING			
Microtype, The Wonderful World of Paws	1–6	Supplementary	32
LANGUAGE ARTS			
Bank Street Writer III	2–12	Recommended	18
Crossword Magic	2–12	Supplementary	22
Magic Slate	2–6	Recommended	28
	7–9	Supplementary	28
Magic Slate II	2–6	Recommended	51
	7–9	Supplementary	51
Mastertype's Writer	4–9	Supplementary	29
MECC Writer	4–9	Supplementary	30
MouseWrite	4–9	Recommended	33
Scholastic MultiScribe	4–9	Recommended	43
LIFE SKILLS			
Choices	10–12	Basic	20
Life Choices Simulation	10–12	Basic	27
LITERATURE			
Bank Street Storybook	3–9	Supplementary	17
LOGIC			
Discover the World	5	Supplementary	23
Geometric PreSupposer, The: Points & Lines	7–9	Supplementary	25
Geometric Supposer, The: Quadrilaterals	7–9	Supplementary	26
Quest for Canada	5	Supplementary	41
Royal Rules, The	7–9	Supplementary	42
Stickybear Town Builder	2	Recommended	44

SUBJECT INDEX

For Software Resources Authorized January 1988 to December 1988

TITLE	GRADES	STATUS	PAGE
MATHEMATICS			
Geometric PreSupposer, The: Points & Lines	7–9	Supplementary	25
Geometric Supposer, The: Quadrilaterals	7–9	Supplementary	26
Royal Rules, The	7–9	Supplementary	42
MEMORY			
Royal Rules, The	7–9	Supplementary	42
MONEY			
ACCPAC (Version 5.0)	10–12	Basic	15
Integrated Accounting (Ed. Version 3.23)	10–12	Basic	49
Simply Accounting (Ed. Version 1.03)	10–12	Basic	61
MULTIPLYING			
Royal Rules, The	7–9	Supplementary	42
MUSIC			
Music Class, The: Note Reading	7–9	Supplementary	34
Music Class, The: Rhythm	7–9	Supplementary	35
Music Theory (Instrumental)	7–9	Basic	36
(Choral)	7–9	Recommended	36
Music Theory – Level I	7–9	Supplementary	37
Music Theory – Level II	7–9	Supplementary	38
Music Theory – Level III	7–9	Supplementary	39
Practical Theory: Complete	7–9	Basic	40
NUMERATION			
Royal Rules, The	7–9	Supplementary	42
PATTERN PERCEPTION			
Royal Rules, The	7–9	Supplementary	42
PROBLEM SOLVING			
Crosscountry Canada	5	Recommended	21
Crossword Magic	2–12	Supplementary	22
Discover the World	5	Supplementary	23
Quest for Canada	5	Supplementary	41
Stickybear Town Builder	2	Recommended	44
PRODUCTIVITY SOFTWARE			
AppleWorks (Version 2.1)	1–12	Basic	47
Bank Street School Filer	4–9	Basic	16
Bank Street Writer III	2–12	Recommended	18
Magic Slate	2–6	Recommended	28
	7–9	Supplementary	28
Magic Slate II	2–6	Recommended	51
	7–9	Supplementary	51
Mastertype's Writer	4–9	Supplementary	29
MECC Writer	4–9	Supplementary	30
Microsoft Word (IBM Version 4.0)	10–12	Basic	55
Microsoft Word (Macintosh Version)	10–12	Basic	57

SUBJECT INDEX

For Software Resources Authorized January 1988 to December 1988

TITLE	GRADES	STATUS	PAGE
PRODUCTIVITY SOFTWARE (continued)			
MouseWrite	4–9	Recommended	33
Reflex: The Analyst (Version 1.14)	10–12	Basic	59
Scholastic MultiScribe	4–9	Recommended	43
WordPerfect (Apple IIe Version)	10–12	Basic	65
WordPerfect (Version 5.0)	10–12	Basic	63
PUZZLES			
Crossword Magic	2–12	Supplementary	22
READING			
Bank Street Storybook	3–9	Supplementary	17
REASONING			
Crosscountry Canada	5	Recommended	21
Discover the World	5	Supplementary	23
Quest for Canada	5	Supplementary	41
Stickybear Town Builder	2	Recommended	44
SIMULATIONS			
Crosscountry Canada	5	Recommended	21
Discover the World	5	Supplementary	23
Life Choices Simulation	10–12	Basic	27
Quest for Canada	5	Supplementary	41
SOCIAL STUDIES			
AppleWorks (Version 2.1)	1–12	Basic	47
Bank Street School Filer	4–9	Basic	16
Crosscountry Canada	5	Recommended	21
Discover the World	5	Supplementary	23
Quest for Canada	5	Supplementary	41
Reflex: The Analyst (Version 1.14)	10–12	Basic	59
Stickybear Town Builder	2	Recommended	44
SPREADSHEETS			
AppleWorks (Version 2.1)	1–12	Basic	47
SUBTRACTION			
Royal Rules, The	7–9	Supplementary	42
THOUGHT AND THINKING			
Crosscountry Canada	5	Recommended	21
Discover the World	5	Supplementary	23
Quest for Canada	5	Supplementary	41
Stickybear Town Builder	2	Recommended	44
VISUAL DISCRIMINATION			
Discover the World	5	Supplementary	23
Quest for Canada	5	Supplementary	41
Stickybear Town Builder	2	Recommended	44

SUBJECT INDEX
For Software Resources Authorized January 1988 to December 1988

TITLE	GRADES	STATUS	PAGE
VOCABULARY			
Bank Street Storybook	3–9	Supplementary	17
WORD GAMES			
Crossword Magic	2–12	Supplementary	22
WORD PROCESSING			
AppleWorks (Version 2.1)	1–12	Basic	47
Bank Street Storybook	3–9	Supplementary	17
Bank Street Writer III	2–12	Recommended	18
Magic Slate	2–6	Recommended	28
	7–9	Supplementary	28
Magic Slate II	2–6	Recommended	51
	7–9	Supplementary	51
Mastertype's Writer	4–9	Supplementary	29
MECC Writer	4–9	Supplementary	30
Microsoft Word (IBM Version 4.0)	10–12	Basic	55
Microsoft Word (Macintosh Version)	10–12	Basic	57
MouseWrite	4–9	Recommended	33
Scholastic MultiScribe	4–9	Recommended	43
WordPerfect (Apple IIe Version)	10–12	Basic	65
WordPerfect (Version 5.0)	10–12	Basic	63
WRITING			
AppleWorks (Version 2.1)	1–12	Basic	47
Bank Street Storybook	3–9	Supplementary	17
Bank Street Writer III	2–12	Recommended	18
Magic Slate	2–6	Recommended	28
	7–9	Supplementary	28
Magic Slate II	2–6	Recommended	51
	7–9	Supplementary	51
Mastertype's Writer	4–9	Supplementary	29
MECC Writer	4–9	Supplementary	30
MouseWrite	4–9	Recommended	33
Scholastic MultiScribe	4–9	Recommended	43

FRENCH SUBJECT INDEX

For French Software Resources Authorized January 1988 to December 1988

TITLE	GRADES	STATUS	PAGE
ADJECTIFS			
Bataille de Mots	6–12	Supplémentaire	19
French for Mastery Software	10	Recommandé	24
AIRE			
Math-Thématique 4, 5 (IBM)	3–6	Recommandé	53
COMPRÉHENSION			
Bataille de Mots	6–12	Supplémentaire	19
French for Mastery Software	10	Recommandé	24
CONJUGAISON DE VERBES			
Bataille de Mots	6–12	Supplémentaire	19
French for Mastery Software	10	Recommandé	24
DÉCIMALES ET FRACTIONS			
Math-Thématique 3–6 (IBM)	3–6	Recommandé	53
ESTIMATIONS			
Math-Thématique 3–6 (IBM)	3–6	Recommandé	53
GRAMMAIRE ET ORTHOGRAPHE			
French for Mastery Software	10	Recommandé	24
FRANÇAIS			
Bataille de Mots	6–12	Supplémentaire	19
French for Mastery Software	10	Recommandé	24
Math-Thématique 3–6 (IBM)	3–6	Recommandé	53
Micro SCRABBLE	4–9	Supplémentaire	31
JEUX DE MOTS			
Bataille de Mots	6–12	Supplémentaire	19
Micro SCRABBLE	4–9	Supplémentaire	31
HEURE			
Math-Thématique 3, 4, 6 (IBM)	3–6	Recommandé	53
MATHÉMATIQUES			
Math-Thématique 3–6 (IBM)	3–6	Recommandé	53
NOMBRES ENTIERS			
Math-Thématique 3–6 (IBM)	3–6	Recommandé	53
NOMS			
Bataille de Mots	6–12	Supplémentaire	19
French for Mastery Software	10	Recommandé	24
PÉRIMÈTRE			
Math-Thématique 5 (IBM)	3–6	Recommandé	53

FRENCH SUBJECT INDEX

For French Software Resources Authorized January 1988 to December 1988

TITLE	GRADES	STATUS	PAGE
RÉSOLUTION DE PROBLÈMES			
Math-Thématique 3-6 (IBM)	3-6	Recommandé	53
Micro SCRABBLE	4-9	Supplémentaire	31
SYSTÈME MÉTRIQUE			
Math-Thématique 6 (IBM)	3-6	Recommandé	53
TRADUCTION			
Bataille de Mots	6-12	Supplémentaire	19
French for Mastery Software	10	Recommandé	24
TRANSFORMATIONS GÉOMETRIQUES			
Math-Thématique 6 (IBM)	3-6	Recommandé	53
VOCABULAIRE			
Bataille de Mots	6-12	Supplémentaire	19
French for Mastery Software	10	Recommandé	24

TITLE INDEX

For Software Resources Authorized January 1988 to December 1988

TITLE	CURRICULUM	GRADES	STATUS	PAGE
ACCPAC (Version 5.0)	Business Education	10–12	Basic	15
AppleWorks (Version 2.1)	Language Arts	1–9	Basic	47
	Business Education	10–12	Basic	47
Bank Street School Filer	Productivity Software	4–9	Basic	16
Bank Street Storybook	Language Arts	3–9	Supplementary	17
Bank Street Writer III	Language Arts	2–12	Recommended	18
Bataille de Mots	Français – FSL	6–12	Supplémentaire	19
Choices	Career and Life Management	10–12	Basic	20
Crosscountry Canada	Social Studies	5	Recommended	21
Crossword Magic	Language Arts	2–12	Supplementary	22
Discover the World	Social Studies	5	Supplementary	23
French for Mastery Software	Français – FSL	10	Recommandé	24
Geometric PreSupposer, The: Points & Lines	Mathematics	7–9	Supplementary	25
Geometric Supposer, The: Quadrilaterals	Mathematics	7–9	Supplementary	26
Integrated Accounting (Ed. Version 3.23)	Business Education	10–12	Basic	49
Life Choices Simulation	Career and Life Management	10–12	Basic	27
Magic Slate	Language Arts	2–6	Recommended	28
	Language Arts	7–9	Supplementary	28
Magic Slate II	Language Arts	2–6	Recommended	51
	Language Arts	7–9	Supplementary	51
Mastertype's Writer	Language Arts	4–9	Supplementary	29
Math-Thématique 3–6 (IBM)	Mathématiques	3–6	Recommandé	53
MECC Writer	Language Arts	4–9	Supplementary	30
Micro SCRABBLE	Français	4–9	Supplémentaire	31
Microsoft Word (IBM Version 4.0)	Business Education	10–12	Basic	55
Microsoft Word (Macintosh Version)	Business Education	10–12	Basic	57
Microtype, The Wonderful World of Paws	Computer Literacy	1–6	Supplementary	32
MouseWrite	Language Arts	4–9	Recommended	33
Music Class, The: Note Reading	Music	7–9	Supplementary	34
Music Class, The: Rhythm	Music	7–9	Supplementary	35
Music Theory	Instrumental Music	7–9	Basic	36
	Choral Music	7–9	Recommended	36
Music Theory – Level I	Music	7–9	Supplementary	37
Music Theory – Level II	Music	7–9	Supplementary	38
Music Theory – Level III	Music	7–9	Supplementary	39
Practical Theory: Complete	Music	7–9	Basic	40
Quest for Canada	Social Studies	5	Supplementary	41
Reflex: The Analyst (Version 1.14)	Business Education	10–12	Basic	59
Royal Rules,The	Mathematics	7–9	Supplementary	42
Scholastic MultiScribe	Language Arts	4–9	Recommended	43
Simply Accounting (Ed. Version 1.03)	Business Education	10–12	Basic	61
Stickybear Town Builder	Social Studies	2	Recommended	44
WordPerfect (Apple IIe Version)	Business Education	10–12	Basic	65
WordPerfect (Version 5.0)	Business Education	10–12	Basic	63

EVALUATION REPORTS

Resources Authorized

January 1988 to December 1988

ACCPAC

DESCRIPTION

Title: ACCPAC General Ledger and Financial Reporter
Authors: None cited
Publisher: Computer Associates International, Inc.
Source: 3rd Floor, 1770 Burrard Street, Vancouver, BC V6J 3G7
Subject: Business Education
Topics: Accounting: general ledger and financial reporting

Version: 5.0
Display Language: English
Cost: LRDC Buyer's Guide
Tel. #: (604) 733-2343
Users: Grades 10–12

Components: 4 5¼" disks (2 program and 2 product) or 2 3½" disks, 3 demonstration disks, user's guide (454 p.), installation and using manual (137 p.), menu chart, quick reference card and keyboard overlay

System Requirements: IBM PC/XT/AT/PS/2 models 30, 50 or 80, 512K RAM, PC-DOS 3.1 or later, at least 1 floppy drive and hard disk system (20Mbyte recommended), monitor, 132-character-wide printer.

Other Formats Available (not evaluated): IBM compatibles

PROGRAM DESCRIPTION

"ACCPAC General Ledger and Financial Reporter," one module of a series of related integrated accounting packages, provides financial record keeping and reporting for small- to medium-sized companies with several divisions. The general ledger is batch-operated: transactions can only be posted to the accounts once a batch has been printed (to screen, printer or disk) and balanced. The program identifies errors during printing. The user then edits the batch, which is deleted after posting. The system can contain up to 49 unposted batch files each containing up to 999 transactions. A series of entries may also be distributed to a number of accounts against a single balancing entry.

Account codes can contain up to six letters and/or numbers, but accounts are sorted by number. The user can create a unique classification of accounts or use the one supplied in the Quick Report Writer. Reports provided include trial balance, balance sheet (in detailed report form), income statement (for the company or selected departments), audit trail reports (including company profile, chart of accounts, batch of transactions reports, batch status reports, general ledger listing, trial balance worksheet, source journals, and closing general ledger listing), and nine supplementary and special reports. Reports may be printed to the screen, printer or disk for printing at a later time. A new "finder" function permits file scanning during field entry to look up any key data such as account codes.

PROGRAM EVALUATION

The major strengths of this accounting package include flexibility and adaptability in account acceptance as well as a wide range of report generation features. The program is fast, efficient and has more than enough capacity for high school accounting needs. Accounts and reports can be customized to suit any type of business situation being taught in the classroom, and files can be imported/exported to other programs (Lotus 1-2-3, dBase III, etc.). The student/teacher can design programs with a powerful built-in specification feature, although this is time-consuming and difficult to use. The use of batch files in transaction entry is unconventional, but allows the student to check data and modify them before posting. Printer configurations can be changed from within the Program Manager Menu. Error handling within the program is generally good.

Program operation is relatively easy. Helpful aids for the user include pop-up program menus (both active and background), a Pop-up System Manager Menu providing direct access to all system functions and DOS commands, and on-screen context-sensitive help accessed with the F1 key. A tutorial walks the user through the main functions with simple steps. The manual is extremely well-organized and easy to reference with sample reports, flow-chart of procedures, appendices, glossary and extensive index. Although the documentation is very thorough, it is written for business use and lacks student/teacher resource materials to enable efficient classroom implementation.

STATUS

"ACCPAC" has been authorized as a **BASIC** learning resource for Accounting 20–30.

PURCHASE INFORMATION

Alberta schools may purchase this program from the Learning Resources Distributing Centre. Check your Buyer's Guide or contact the LRDC at 427-2767 for information.

BANK STREET SCHOOL FILER

DESCRIPTION

Title: Bank Street School Filer (128K Version)
Authors: Bank Street College of Education and Franklin E. Smith
Publisher: Sunburst Communications
Source: P.O. Box 3240, Station F, Scarborough, ON M1W 9Z9
Subject: Productivity Software
Topics: Database program applicable to many subject areas
Version: 1986
Display Language: English
Cost: LRDC Buyer's Guide
Tel. #: (800) 247-6756
Users: Grades 4-9
Components: 1 program disk with backup, 1 tutorial disk, 1 classroom tools disk, 1 school database disk, teacher's guide (167p.), reference manual (112p.), quick reference card
System Requirements: Apple IIe/IIc/IIgs, 128K, 1 disk drive, monitor, printer
Other Formats Available (not evaluated): Commodore 64

PROGRAM DESCRIPTION

A 40- or 80-column screen display can be selected for this database. Field types can be defined as: "Anything, Number, Money, Date, Zip, Phone, Time or Computed." Each field can be a maximum of 93 characters less a maximum of 15 characters for the field name. A comment field, with a maximum of 255 characters, can be defined and added to any record. A maximum of 50 fields per record is possible with a maximum of 512 records per file. An on-screen calculator is available for the four basic mathematical calculations. The search feature handles up to four selection criteria in one sentence. The user works from overlapping windows to complete his or her selections. The FIND option can use "AND" and "OR" operators and a variety of comparison phrases based on the type of field. Sorting is possible alphabetically, numerically, with dates or times, in ascending or descending order, etc. The BROWSE function allows the user to view all the records while the FIND function allows the user to specify and view only some of the records in the file. A help screen is available. The PRINT REPORT option allows the user to access predefined formats and create custom formats. Up to four criteria may define records to include in the report, and records may be printed in the browse order, the last sort order or in a specific order by creating a sort sentence. The teacher's guide includes a teacher tutorial that assumes no knowledge of databases, sample lessons for introducing students to database applications, curricular ideas for using databases in various subject areas and 29 reproducible activity sheets. Special topics such as splitting and combining files and migration of reports to a word processor are included, as well as tips on use and trouble shooting. There is no management system included. This program can interface with "Bank Street Writer" and "Magic Slate." Other ready-made databases, which have not been evaluated, have been designed specifically for use with "Bank Street School Filer."

PROGRAM EVALUATION

The documentation and support materials are outstanding and provide a comprehensive package. The pre-made databases are excellent teaching materials. Searches and sorts are very clear to understand and easy to learn. Although this package, with all its components, has sufficient power to teach introductory databases, it does not likely have sufficient power for the more sophisticated database management activities or for complete school management tasks. Without the ability to create a custom menu for file listings, the database is of limited use for serious management activities.

There are three major weaknesses of "Bank Street School Filer." It lacks provisions for multiple record layouts to allow the user to work with several fields on the screen at one time (multiple records can be viewed as a report format). If errors are made in a SEARCH, FIND or PRINT routine, no escape option is available to back up one step without starting the routine from the beginning. The ability to store only three report formats per file can at times be insufficient.

The fact that the name must be typed rather than just highlighted when retrieving a file can lead to unnecessary errors. Although the onscreen menus are useful for the novice user, they are cluttered and tedious for the user who has become proficient. There are numerous questions to answer in the report format that are a help to the new user, though time consuming. The existing reports are varied and provide useful examples of information processing activities such as analysing, comparing and contrasting, synthesizing, and organizing data into new forms.

STATUS

"Bank Street School Filer" has been authorized as a **BASIC** learning resource for grades 4 to 9.

PURCHASE INFORMATION

Alberta schools may purchase this program from the Learning Resources Distributing Centre for $151.80 (1989) less a 25% subsidy discount. Check your Buyer's Guide or contact the LRDC at 427-2767 for warranty information.

BANK STREET STORYBOOK

DESCRIPTION

Title: Bank Street Storybook
Author: George Brackett
Publisher: Mindscape Inc.
Source: c/o GLC Publishers Ltd, 115 Nugget Ave, Agincourt, ON M1S 3B1
Subject Language Arts
Topics: Creating stories and illustrations

Version: 1985 Ver. 1.1
Display Language: English
Cost: $74.95 (1988)
Tel. #: (416) 291-2926
Users: Grades 3-9

Components: 1 double-sided disk with backup, teacher's guide (32p.), user's guide (64p.)
System Requirements: Apple II + /IIe/IIc/IIgs, 64K, 1 disk drive, colour monitor preferred, joystick or koala pad required, printer (optional)
Other Formats Available (not evaluated): IBM PC/PCjr, Tandy 1000, Commodore 64/128

PROGRAM DESCRIPTION

This program is a combination word processor and graphic utility allowing the user to create multipage stories using text, graphics, colour and animation. Screens are generated in sequential order, and the user may add, delete or revise screens throughout the story by placing text anywhere on the display. Text is limited to 7500 characters or approximately 10 screen pages. Drawings, including some animation, are created through a joystick or koala pad. Twenty-one different colour mixtures are available. Both text and illustrations can be edited and revised and stories can be stored on a disk and printed. A full tutorial on all the program's functions is provided with sample stories for student use. NEW is used to begin creating a story; the LINE function allows the user to draw lines; the COLOUR function can colour shapes with either mixed or pure colour from eight choices on the colour chart; TYPE turns the keyboard into a word processor; WAIT allows the user to put pauses in the story; FLIP turns an electronic page; and READ allows the student to see what has been done so far. No management system is provided.

PROGRAM EVALUATION

This creative writing tool is motivational and adaptable to a wide variety of learning environments in various subject areas. The documentation is comprehensive and covers the information required to use the program well. Though both the manual and disk tutorial clearly describe the process required to produce the text and illustrations, considerable computer time will be required for each student to complete a project (depending on the keyboarding skills of the users). As a wide list of options is available, Grade 3 and 4 students may experience some difficulty using the program, especially if they have had little computer practice. Students may find a koala pad easier to use than a joystick as it was noted that first-time users who were not familiar with a joystick had considerable difficulty creating smooth designs. The program will work on a monochrome monitor, but a colour monitor is more effective; the colours in the sample stories are sharp and clear. Inexperienced users may need teacher encouragement to complete the initial project since some students may become frustrated before they achieve a degree of proficiency in creating graphics.

STATUS

"Bank Street Storybook" has been authorized as a **SUPPLEMENTARY** learning resource for grades 3 to 9.

PURCHASE INFORMATION

This program may be purchased for $74.95 (1988) from GLC Publishers at the address provided at the beginning of the report. Class packs, consisting of five disks, a backup and documentation, may be purchased for $159.95 (1988). This program may be available locally; check with your software dealers. Damaged merchandise will be replaced if reported to the publisher's Customer Service Department within 10 days of receipt of the goods. Due to frequent disk interaction, this program may be used on only one computer at a time.

BANK STREET WRITER III

DESCRIPTION

Title: Bank Street Writer III
Authors: Bank Street College of Education, Franklin Smith and Intentional Ed
Publisher: Scholastic Inc.
Source: 123 Newkirk Road, Richmond Hill, ON L4C 3G5
Subject: Language Arts
Topics: Word processor
Version: 1986
Display Language: English
Cost: LRDC Buyer's Guide
Tel. #: (800) 268-3860
Users: Grades 2–12
Screen Display: 20/40/80 col
Components: 2 program disks with backups, 1 dictionary disk with backup, teacher's guide (223p.)
System Requirements: Apple IIe/IIc/IIgs, 128K, 1 disk drive, monitor, printer, mouse (optional)
Other Formats Available (not evaluated): IBM PC/XT/AT/PC jr, Commodore 64

PROGRAM DESCRIPTION

Three word processing formats are available: a 20-column version offering rudimentary functions for younger or special needs students; and 40-column or 80-column versions offering the full range of word processing features. Three modes of operation exist: the WRITE screen; the FUNCTION menu; and the UTILITIES menu which is accessed by pressing ESC while the program is loading. The FUNCTION menu has the submenus FILE, EDIT, SPELL, OPTIONS, DISK and QUIT. Scrolling by mouse or with arrow keys can be done by line, 15 lines, and to the beginning or end of the document. Blocks of text up to 15 lines can be moved or copied, and a buffer permits the user to immediately "UNDO" an erase or copy selection. The search/replace function is case-sensitive and will search, in forward motion, for characters, words or short strings. There are no provisions for storing printer setups as embedded (in-text) commands but spooling is available and printing can be aborted. The print to screen option, which is available in the 40/80 column formats, allows the student to view on screen the printed page, including headers, page numbers and line numbers if they are selected. While working with a given file, it is possible to retrieve other files, one at a time, and these are placed wherever the cursor is situated at the time of retrieval. When deleting files, reminders and prompts are presented. The program can access binary files from other sources including ASCII text files and can convert to and from DOS 3.3/ProDOS so that files from many different sources can be used. The program interfaces with "Bank Street Filer," a database program.

PROGRAM EVALUATION

"Bank Street Writer III" is a valuable word processing tool for a wide variety of students from grades 4 to 9. It is easy to use and contains many special features: a built-in calculator; a spelling checker, dictionary and thesaurus; and a frozen text feature. Screen prompts are clear and offer step-by-step instructions. The use of reverse displays to highlight the block of text to be erased, moved or copied makes the processes very clear. Erase/undo last erase and move/undo last move are helpful features. The excellent "define function" option allows the creation of up to 20 keyboard macros, each representing from one to 32 keystrokes, which can do, in just one step, just about anything the program can do. Mnemonic control keys and on-line help make the editing easy. Tedious questions for printing can be overridden, speeding the printing process. The screen displays are uncluttered and attractive. A very good file management system gives reminders and prompts at every step. The major weaknesses of this program include the 15-line limit for block text moves, the lack of right justification and the inability to save printer setups in the files. The lack of password security, the inability to disable word wrap, and the inability to accommodate super/subscripts are minor drawbacks. The documentation is very useful, descriptive, easy to read and well-illustrated. Many suggested student activities for learning the writing process and the program are provided, and the on-disk tutorial enables students to use the program independently and quickly produce short documents. The lack of a comprehensive index and trouble-shooting guide is a weakness. The program is easy to learn, reliable for normal classroom use and requires minimum teacher supervision.

STATUS

"Bank Street Writer III" has been authorized as a **RECOMMENDED** learning resource for grades 2 to 12.

PURCHASE INFORMATION

Alberta schools may purchase this program from the Learning Resources Distributing Centre for $94.85 (1988). Check the LRDC Buyer's Guide or contact them at 427-2767 for warranty information. This program is capable of operation on more than one computer at a time; however, such use is subject to copyright laws and any licence or purchase agreement.

BATAILLE DE MOTS

DESCRIPTION

Title: Bataille de Mots
Authors: David Hinson and Hugh McNally
Publisher: Gessler Educational Software
Source: 900 Broadway, New York, NY 10003
Subject: French Language Arts
Version: 1987 Ver. 2.0
Display Language: Eng/Fr
Cost: $49.95 US (1988)
Tel. #: (212) 673-3113
Users: Grades 6-12
Topics: Drill on vocabulary associated with: school, food, sports, travel, daily life and occupations
Components: 1 program disk, 1 data disk, teacher's guide (44p.)
System Requirements: Apple IIe/IIc/IIgs, 64K, 1 disk drive, monitor, printer (optional)
Other Formats Available (not evaluated): IBM PC, Commodore 64/128. Also available in German and Spanish

PROGRAM DESCRIPTION

"Bataille de Mots" is a vocabulary building program designed to help beginning and intermediate level language students learn the definition and usage of new words. The program is divided into five task areas: vocabulary review, quick vocabulary scan, multiple choice quiz, fill in the blanks and game. Also included in the program are System Utilities which allow the teacher to generate a test and print it, create/edit a topic, prepare a custom data disk, print a topic delete a topic, and configure the system.

Student interaction is extensive and includes special key sequences for entering French accents. Feedback is provided after all user responses. No pre- or post-tests are provided, but the teacher has access to a test generator through the System Utilities menu that allows the creation of printed tests and test keys.

PROGRAM EVALUATION

The instructional format maintains student interest and provides a stimulating learning experience for the students. The easy access to all necessary special French characters is valuable. The program is well-designed, easy to use and readily adaptable to classroom use. The error analysis enhances the educational value of the program. The editor in the System Utilities provides a structure within which teachers can customize the program to meet the needs of their particular students, but the use of this feature requires a significant time investment. The test generator allows the teacher to quickly and easily create tests that correspond directly to the material in the program. The high degree of user control is an excellent feature. The arcade-type game is highly motivating, even to the reluctant learner.

It is unfortunate that a management system has not been included to record students' progress and that tests are generated for hardcopy use only.

The 44-page teacher documentation is operationally comprehensive and includes a glossary of the words on the data disk. No user support materials are provided.

NOTE

With regard to Tolerance and Understanding criteria, it should be noted that references made to the sexes tend to reflect stereotypical male and female roles. Furthermore, there is an imbalance in the number of male/female references. However, because the program includes an authoring component that easily allows changes to any or all references on the data disk as well as the creation of data files, the teacher can use his or her discretion in using the program.

STATUS

"Bataille de Mots" has been authorized as a **SUPPLEMENTARY** learning resource for grades 6 to 12.

PURCHASE INFORMATION

This program is available for $49.95 US (1988) and backup disks may be purchased for $9.95 US (1988) from Gessler Educational Software at the address provided at the beginning of the report. Defective disks will be replaced free of charge within a 60-day warranty period. This program can operate on more than one computer at a time once the data disk has been loaded; however, such use is subject to copyright laws and any licence or purchase agreement.

CHOICES

DESCRIPTION

Title: Choices
Author: Canadian Employement and Immigration Commission
Publisher: CSG Corporation
Source: c/o Educom, 8422-109th Street, Edmonton, AB T6G 1E2
Subject: Career and Life Management
Topics: Occupational and educational counselling and guidance

Version: 1985
Display Language: English
Cost: LRDC Buyer's Guide
Tel. #: (403) 439-7447
Users: Grades 10-12

Components: 14 disks (IBM), 5 disks (Apple), reference manual (144p.), master list of programs and instructions (125p.), 50 guides (46p.)

System Requirements: IBM: IBM PC/XT/AT, MS-DOS 2.1 or higher, 256K, 2 floppy drives or 1 drive and hard disk, colour or monochrome monitor, appropriate graphics card, parallel printer
Apple: Apple II + /IIe/IIc/IIgs, 48K, 2 disk drives, monitor, printer

Other Formats Available (not evaluated): IBM compatibles

PROGRAM DESCRIPTION

"Choices" deals with occupational and educational decisions. "Occupations" allows the user to access data on 885 major occupations and 2500 related occupations. Some of the topics include: education levels, earnings, aptitudes, training requirements, hours of work and travel, environmental conditions, similar occupations and summary of work performed. "Education" accesses data on over 400 Canadian postsecondary institutions and 3000 programs. Information available here includes: admission requirements, student enrolment, housing and tuition costs. Students may print all or part of their interaction with the program. The program is supplemented by a self-assessment workbook, the "Choices Guide," which includes an overview of the program; assessment of topics; preparation for bargaining; choosing education routes and making decisions. The guide must be completed using the computer. A number of special commands or key words allow the counsellor/teacher to bypass introduction and information screens, produce immediate printouts and access a summary of the student's profile.

PROGRAM EVALUATION

The "Choices" program offers a comprehensive database on occupational and educational opportunities that is appropriate for high school students. The "Choices Guide" encourages students to provide accurate information, pre-plan their interaction and understand the meanings of the topics and factors. Topic choices may focus on career alternatives to a point where there are no occupations matching the student's responses, forcing the student to revise or accept certain choices. The range and depth of the content are excellent, and the linear sequencing within each section ensures that the student can easily progress through the variety of routes and alternatives in the program. There is no evaluation questioning. Interaction in the program is straightforward, but the frequent page-turning combined with the extensive content can make the program cumbersome at times. Questioning techniques are appropriate though somewhat repetitive. Some screen displays are somewhat cluttered, and there are some typographical errors, both in the documentation and on the screen. Some of the error handling messages are unclear and do not help the student identify an acceptable response. The program hangs if printer is accessed without a printer connected to the computer, if too many characters are entered for base codes, or if a disk is inserted in the wrong drive. The Apple version of "Choices" is slower than the IBM version but content is the same. Student and counsellor/teacher satisfaction with the counselling process is increased if the program is used with constant guidance and interaction. Use of this program requires extra preparation time and more counselling, not less.

NOTE

The Apple version of the "Choices 89 Update" does not contain the education disks because it is being revised. In Fall 1989, there will be a new Apple IIgs version that will include the education component.

STATUS

"Choices" has been authorized as a **BASIC** learning resource for grades 10 to 12.

PURCHASE INFORMATION

Alberta schools may purchase this program through the Learning Resources Distributing Centre; contact them for price and warranty information. Due to frequent disk interaction, this program may be used on only one computer at a time.

CROSSCOUNTRY CANADA

DESCRIPTION

Title: Crosscountry Canada
Author: Dave Vincent
Publisher: Didatech Software Ltd.
Source: 3812 William Street, Burnaby, BC V5C 3H9
Subject Social Studies
Topics: Factual knowledge about the economic and political geography of Canada

Version: 1986
Display Language: English
Cost: LRDC Buyer's Guide
Tel. #: (604) 299-4435
Users: Grade 5

Components: 1 double-sided disk with backup, teacher's guide (42p.), reference card, 1 large map, 10 small maps
System Requirements: Apple II + /IIe/IIc/IIgs, 64K, 1 disk drive, colour monitor preferred, printer (optional)
Other Formats Available (not evaluated): Available only in Apple format

PROGRAM DESCRIPTION

"Crosscountry Canada" presents facts about the economic and political geography of Canada. It is an interactive simulation that reinforces basic conceptual skills related to map reading and interpretation. The "real-life" situation of a long-distance truck diver is used to present relationships between time, distance and money. The student is required to plan a route and strategy to minimize the expenses of a trip across Canada to pick up a number of randomly generated commodities, located in one of 80 cities.

Students enter instructions such as "eat," "sleep," "go northwest" and travel by typing in the direction, limited to eight compass points, they wish to go. A customizing feature which allows a choice of 50 commodities to be assigned to different cities and allows play at three levels of difficulty. Students must constantly make decisions on the actions they will take.

Animated graphics, colour and sound are used extensively for feedback. Colour is not essential and sound may be disabled. The screen display consists of the dashboard of the truck. Two maps can be accessed to show the student's current location in Canada and in the particular province.

A 42-page manual includes information on educational objectives and issues, suggestions for classroom implementation of the program, program operating instructions and information on customizing the program. Appendices provide vocabulary lists, commodities/cities lists, a route planning guide, error handling and computer operation instructions. Student support materials include a large wall map of Canada showing routes between the various cities, small maps of Canada, a commodity/city cross-reference card and a route planning guide.

PROGRAM EVALUATION

Map reading and interpretation skills are reinforced and students are forced to make inferences, develop strategies and make decisions. Levels of play and the customizing feature allow the teacher to create standard simulations for teams of students or to emphasize specific areas. Younger students may find the detail required to accomplish tasks somewhat difficult and some may become more involved in the physical aspects of the trip, such as turning the windshield wipers, radio, headlights, etc. on and off. The use of randomization ensures that each of the simulations played by individual students or groups of students is different.

The program's factual base and situations encountered during the trip maintain the realism of the simulation. Students should have a basic knowledge of Canadian geography as well as some knowledge of the keyboard. Economic information is somewhat limited and teachers should be prepared to supplement the information provided.

The technical characteristics, use of Canadian songs in various parts of the program, as well as sound effects that match the action, all contribute to the motivational value and effectiveness of this easy-to-use program. Documentation is comprehensive and easy to follow.

STATUS

"Crosscountry Canada" has been authorized as a **RECOMMENDED** learning resource for Grade 5.

PURCHASE INFORMATION

Alberta schools may purchase this program from the Learning Resources Distributing Centre for $51.75 (1989). Contact the LDRC at 427-2767 for pricing and warranty information. Due to frequent disk interaction, this program may be used on only one computer at a time.

CROSSWORD MAGIC

DESCRIPTION

Title: Crossword Magic
Author: Larry Sherman
Publisher: Mindscape Inc.
Source: c/o GLC/Silver Burdett, 115 Nugget Ave., Agincourt, ON M1S 3B1
Subject: Language Arts, Utility
Topics: Creation of crossword puzzles for use in various subject areas
Version: 1985
Display Language: English
Cost: $74.95 (1988)
Tel. #: (416) 291-2926
Users: Grades 2-12
Components: 1 disk with backup, teacher's guide (24p.), user's guide (29p.)
System Requirements: Apple II + /IIe/IIc/IIgs, 48K, 1 disk drive, monitor, printer (recommended)
IBM PC/PCjr, 128K, 1 disk drive, (second drive optional), monitor, printer (recommended)
Other Formats Available (not evaluated): Commodore 64/128

PROGRAM DESCRIPTION

This interdisciplinary educational tool is adaptable to various levels of difficulty and is designed to provide students with the opportunity to develop crossword puzzles for practising or testing the content or vocabulary of any subject area. The program can also be used to improve spelling skills and encourage the development of dictionary and other resource skills. This program allows the user to make, edit, print, save, copy and delete a puzzle. Inputted words are placed in a crossword format by the computer. The puzzles can be solved on the computer or in print form. The teacher documentation contains the introduction to the program, a list of educational objectives, information about use of the program, suggested classroom applications and blackline crossword puzzle masters. The user's guide explains getting started, outlines main menu and special options, provides helpful crossword clues and suggests ideas for creating crossword puzzles.

PROGRAM EVALUATION

This flexible program can be used for any subject area at a desired difficulty level by either teacher or student. To complete puzzles on the computer or on paper, students use clues to develop vocabulary, spelling skills, problem-solving strategies and knowledge of specific subjects. Creating puzzles provides a learning experience that allows students to use creativity while testing their familiarity with a subject and their thinking, planning and researching skills.

Screen displays, text, highlighting and graphics are used effectively. The printed version of the grid has a neat and pleasing appearance. Movement within the crossword grid is hampered by the cursor appearing in the middle of some words after RETURN is pressed. It would be more convenient to have the cursor appear at the beginning of the next word. It was also noted that clues are displayed at the bottom of the screen as the student moves the cursor around the puzzles. This may be somewhat confusing, especially to the younger target audience.

The teacher documentation offers sufficient information for relatively easy use of the program. The user's guide must be followed carefully, especially in the initial stages of use. The suggestions for classroom applications are helpful. The program functions well and can be used by a teacher with minimum computer competency though time is required to create effective crossword puzzles.

The inclusion of a management system would be beneficial.

A comparison of the Apple and IBM versions revealed no significant differences in the content or instructional format except that the IBM version does not have the crossword puzzle in the clear grid format of the Apple version.

STATUS

"Crossword Magic" has been authorized as a **SUPPLEMENTARY** learning resource for grades 2 to 12.

PURCHASE INFORMATION

This product may be purchased for $74.95 (1988) from the address provided at the beginning of the report. Defective disks will be replaced free of charge within a 30-day warranty period and for a fee of $10.00 for a period of one year. This program can operate on more than one computer at a time, subject to copyright laws and any licence or purchase agreements.

DISCOVER THE WORLD

DESCRIPTION

Title: Discover the World
Author: Entrex Software
Publisher: Scholastic Inc.
Source: 123 Newkirk Road, Richmond Hill, ON L4C 3G5
Subject: Social Studies
Topics: Simulation of the 15th century European voyages in search of a trade route to China
Components: 3 disks, teacher's guide (50p.)
System Requirements: Apple II + /IIe/IIc/IIgs, 64 or 128K, 1 disk drive, monitor
Other Formats Available (not evaluated): IBM PC, Commodore 64

Version: 1987
Display Language: English
Cost: $129.00 (1989)
Tel. #: (800) 268-3860
Users: Grade 5

PROGRAM DESCRIPTION

This simulation allows students to explore trading routes from Europe to the East. Students negotiate to "purchase" equipment and supplies from their sponsoring country, then "sail" using on-screen help such as a map, compass, "look-out," "advice," a "report" function and a bar graph representing the supplies remaining on their ship. The ship's line of travel is presented on the screen. Textual messages inform students of wind velocity and direction; land, natives or pirates approaching; rocks or reefs hit by the ship; mutiny or scurvy threatening the crew, etc. When students reach their destination they can claim the country, hunt, or trade. Points and provisions are earned for distance covered, countries claimed and questions correctly answered. Students can control the ship's direction using arrow keys, but do not actually activate the ship and therefore cannot control the ship's speed. Three levels of difficulty are available: "Able Seaman" for grades 5 to 7, "Captain" for grades 8 to10, and "Master Manner" for experienced users. Options include the "Explorer's Notebook" (multiple-choice questions that the student must answer before proceeding), "Topics" (historical, geographical and general information), and "Words" (a glossary of terms and background information). Teachers can modify the questions presented to the students and can print out the "Topics" so that students can access reference information in hard copy. Student games can be saved, and a record-keeping system allows teachers to check individual student scores for the simulations (territories claimed, gold coins won, travel distance and time, questions correctly answered, etc.). Documentation includes full instructions and strategy tips for using the simulation and options, as well as lesson plans, maps, six assignment sheets and a 30-question multiple choice post-test.

PROGRAM EVALUATION

This simulation presents a wealth of geographical and historical information in a challenging problem-solving format. Students must use mapping skills to determine their location and plan travel routes, as well as strategy formulation and decision-making skills to define and test strategies, examine alternatives, implement a plan of action and evaluate the decision. Students also develop research skills, as they must search for, select and apply information available in a variety of forms (graphs, maps, textual status reports, compass readings, "crow's nest" view of the terrain, etc.) to make decisions. The situations presented to the student recreate the difficulties faced by the explorers in a realistic manner. The game can accommodate individual student skills with the three levels of difficulty. The "Explorer's Notebook" questions are generated by a limited data bank, are somewhat irrelevant to the actual simulation, and students can easily guess without attempting to think or reference the "Topics" section. Graphics are limited though useful in presenting necessary information. The ships "travel" very slowly, and unfortunately students cannot control the speed.

Teachers should be aware that the basic value underlying the simulation is aggressive competition for gain, involving conquering countries and attacking when necessary. This accurately reflects the spirit of 15th-century exploration, but teachers may want to help students examine these values critically.

The game is very complex, and requires considerable time from both teachers and students for the program objectives to be achieved. If used appropriately, this program has potential to be motivating and highly effective in developing a wide range of skills. "Discover the World" is intended to be used as enrichment for Grade 5 students requiring greater challenge.

STATUS

"Discover the World" has been authorized as a **SUPPLEMENTARY** learning resource for Grade 5 social studies.

PURCHASE INFORMATION

This program may be purchased for $129.00 (1989) from Scholastic Inc. at the address given at the beginning of the report. It may also be available locally; check with your software dealers.

FRENCH FOR MASTERY SOFTWARE

DESCRIPTION

Title: . French for Mastery Software
Authors: Jean-Paul Valette and Rebecca M. Valette
Publisher: D.C. heath Canada Ltd.
Source: Suite 1600, 100 Adelaide Street West, Toronto, ON M5H 1S9
Subject: French Language Arts
Topics: Numbers, time, verbs, French-English equivalents, logical completion, completing French sentences, vocabulary, nouns, adjectives

Version: 1985
Display Language: Eng,Fr
Cost: LRDC Buyer's Guide
Tel. #: (416) 362-6483
Users: Grade 10

Components: 3 double-sided disks with backup for program master, teacher's manual (17p.)
System Requirements: Apple II + /IIe/IIc/IIgs, 64K, 1 disk drive, monitor (colour optional)
Other Formats Available (not evaluated): IBM PC

PROGRAM DESCRIPTION

"French for Mastery Software" is intended as a base for developing communication proficiency and to encourage students to spend the time necessary for the acquisition of this new vocabulary. The content is divided into a prelude and eight units, each containing from three to six subunits with six to 30 questions. Each unit covers some nouns, verbs, adjectives, expressions and ends with a review called pele-mêle. Some of the topics covered include reading and writing numbers, telling time, logical responses, English-French equivalents and forms, French-English equivalents, identifying pictures and verb forms, etc. Questioning techniques include multiple choice, fill in the blanks and completing sentences. Although questions are presented in a pre-programmed order, the distractors change positions. The program includes immediate positive and negative feedback as well as quantitative feedback. Combinations of aural, graphic and textual feedback are provided after each student input. Student interaction varies according to the type of answer being solicited by the program. The program uses both upper and lower case letters and includes all necessary special French characters via the number keys. The teacher's manual includes an introduction, objectives, instructions for running the program, suggestions for the integration of the software with the French for Mastery Program, suggestions for use, a quick reference section, sample activities, a list of activities and a score sheet. No user support materials are included.

PROGRAM EVALUATION

The content range is extensive, sequenced in a logical manner and intended to accompany "Salut, les amis". The depth of treatment is good, as previously learned content is reinforced in subsequent units in a type of spiralling curriculum. However, some students may be overwhelmed by the amount of material presented, especially if it is not first presented in class. Teachers should be aware that the program is limited to accepting only one response as correct, when others in fact are also grammatically accurate. A few minor inaccuracies were noted; for example, "Habiter Geneve" should be "Habiter à Geneve." There is a definite lack of Canadian content as the program centres around European information. The variety of questioning techniques is appropriate for the target audience. The student is actively involved in the learning process. It is unfortunate that questions are not randomized within each section providing more variety for the student. The overall technical quality of the program is satisfactory; however, some of the graphics that must be identified are difficult to recognize and a fair amount of disk swapping is required to get started. The optional sound is used effectively. The teacher documentation is minimally adequate as it does not indicate all the topics covered in the program. Sample screen displays and sample activities are useful for the teacher. Unfortunately, the teacher can not pre-program activities to individualize the content. A management system to select activities and record students progress would have enhanced the educational value of the program. The teacher requires little computer competency to effectively implement this program.

STATUS

"French for Mastery Software" has been authorized as a **RECOMMENDED** learning resource for French 10.

PURCHASE INFORMATION

Alberta Schools may purchase this program from the Learning Resources Distributing Centre for $278.15 (1988). Check the LRDC Buyer's Guide or contact them at 427-2767 for warranty information. This program has the advantage of being capable of operation on more than one computer at a time; however, such use is subject to copyright laws and any licence or purchase agreement.

THE GEOMETRIC PRESUPPOSER: POINTS AND LINES

DESCRIPTION

Title: The Geometric PreSupposer: Points and Lines
Authors: Judah Schwartz and Michal Yerushalmy
Publisher: Sunburst Communications
Source: P.O. Box 3240, Station F, Scarborough, ON M1W 9Z9
Subject: Mathematics
Topics: Construction of geometric shapes using a straightedge and compass, measuring shapes
Components: 1 disk with backup, teacher's guide (97p.),quick reference card
System Requirements: Apple II + IIe IIc IIgs, 64K, 1 disk drive, monitor
Other Formats Available (not evaluated): Available only in Apple format

Version: 1986
Display Language: English
Cost: $132.00 (1989)
Tel. #: (800) 247-6756
Users: Grades 7-9

PROGRAM DESCRIPTION

PreSupposer is a utility package that provides opportunities to recognize geometric shapes by observation, classification and construction, as well to discover relationships among figures by exploring the properties of those figures. The user can execute endless constructions involving points, angles, segments, triangles, quadrilaterals, polygons and circles, as well as draw inscribed and circumscribed circles, angle bisectors, perpendiculars and parallels. The student can measure lengths, angles, areas, circumferences and combinations of these measures. A Cartesian grid can be displayed on any construction for learning coordinate geometry and making first estimates of measurements and geometric properties.

No entry competencies are specified but the users will require a basic knowledge of geometric shapes and terms. Student interaction consists of menu and submenu selection and numeric input to indicate specific measures. Arrow keys are used to position constructions. This program does not offer direct questioning or evaluation. The content, sequence and depth are user controlled. The documentation provides rationale, a detailed description with instructions and menu and submenu selections, suggestions and strategies for using the program and exercises that deal with a range of topics. A quick reference card describes the main menu/submenu selections and is cross-referenced to the teacher's guide. No management system is offered.

The screen is divided into three sections: the data column, the construction pad and a window for menus and prompts. The program loads fully upon initial booting and beeps when an inappropriate entry is made. High resolution graphics are used in the construction of geometric shapes.

PROGRAM EVALUATION

PreSupposer is open ended, providing a creative tool by which students can gain an understanding of geometry concepts and skills. The content is accurate, relevant and extremely well suited to the computer medium. Student interaction is effective; the student actively participates in the learning process by constructing, manipulating and performing mathematical calculations. This program effectively promotes inquiry and investigation. Though this program is much like a computerized geometry set, it does not replace hands-on learning, but allows numerous constructions and calculations to be explored.

Displays are clear and appropriate. Graphics are simple but effective, though some segments and the circles have a ragged appearance. The program is easy to use once the students have had brief instruction and a little practice. The students require a basic knowledge of geometry. It is unfortunate that the program neither saves the constructions for later use nor provides a print option.

The teacher's guide is comprehensive and suggests that the teacher take the time to cover the documentation adequately and be prepared to do careful planning for the effective use of this program. The suggested strategies and exercises can be very helpful.

STATUS

"The Geometric PreSupposer: Points and Lines" has been authorized as a **SUPPLEMENTARY** learning resource for grades 7 to 9.

PURCHASE INFORMATION

This product may be purchased for $132.00 (1989) from Sunburst Communications at the address given at the beginning of the report. Lab packs, containing the documentation and 10 disks, may be purchased for $396.00 (1989). An AppleTalk Network version is available for the same price as the lab pack. The program may also be available locally; check with your software dealers. The publisher provides a lifetime warranty on its courseware. Permission is given to take the disk out of one computer after the program has been loaded and put it into another computer (see page 97 of the teacher's manual).

THE GEOMETRIC SUPPOSER: QUADRILATERALS

DESCRIPTION

Title: The Geometric Supposer: Quadrilaterals
Authors: Judah Schwartz and Michal Yerushalmy
Publisher: Sunburst Communications
Source: P.O. Box 3240, Station F, Scarborough, ON M1W 9Z9
Subject: Mathematics
Topics: Experiments in the construction and properties of quadrilaterals
Components: 1 disk with backup, teacher's guide (116p.), quick reference card
System Requirements: Apple II +/IIe/IIc/IIgs, 64K, 1 disk drive, monitor
Other Formats Available (not evaluated): IBM PC, Tandy 1000

Version: 1985
Display Language: English
Cost: $132.00 (1989)
Tel. #: (800) 247-6756
Users: Grades 7-9

PROGRAM DESCRIPTION

In this program users experiment with quadrilateral constructions and make conjectures about geometric theorems regarding the relationships among geometric forms. Students construct geometric forms (parallelograms, trapezoids, kites, etc.) as well as draw perpendiculars, segments, parallels, angle bisectors, and inscribed and circumscribed circles. The user can measure area, length, angles, and perform mathematical operations on these values. The content, sequencing and depth are user controlled. The program records the construction procedure, which can then be saved and later executed with any other quadrilateral.

No entry competencies have been specified; however, the students will require some knowledge of quadrilaterals and need to be briefed on the operation of the program. Students choose the specifications and types of quadrilaterals to be displayed or constructed. This program does not offer direct questioning or evaluation. Students are provided with the raw data and a tool to present endless graphic constructions and are encouraged to draw conclusions.

Text is presented in standard size. The screen is divided into three sections: for menu selection, construction and measurements. Graphics are used in the construction of the shapes and the program also contains a scale change option that permits the user to see a larger figure.

The documentation provides a rationale for the program, a detailed program description with instructions and illustrations for each menu and submenu selection. It also provides suggestions for using the program as a teaching tool and offers examples and exercises for making conjectures. A quick reference card describes the main command selections and is cross-referenced to the teacher's manual where additional information may be obtained.

PROGRAM EVALUATION

Although this program will not replace the experiences of actually constructing geometric shapes with a geometry set, it does make constructions quickly and relatively easily. The program is not instructional in nature but can be used effectively with most of the target audience. The lack of a management or authoring system is not a concern.

This program promotes discovery learning by giving students opportunities to use their creativity in the manipulation, construction and exploration of geometric relationships. Students using this program must have sufficient fundamental understanding of geometric constructions to benefit from the program. Without sufficient background, they may find the program too challenging. The program encourages higher level thinking skills in forming and testing hypotheses. However, successful use of this program depends to a high degree on careful and thorough teacher preparation and instruction. The documentation is comprehensive and is an important part of the program. Teachers are encouraged to take the time and effort to acquaint themselves with the documentation and become familiar with the potential of the program before using it with the students.

The graphics are effective. The ability to load the program fully upon initial booting is a strength. It is unfortunate that the program does not include a save command to save constructions for later use or print constructions.

STATUS

"The Geometric Supposer: Quadrilaterals" has been authorized as a **SUPPLEMENTARY** learning resource for grades 7 to 9.

PURCHASE INFORMATION

This product may be purchased for $132.00 (1989) from Sunburst Communications at the address provided at the beginning of the report. Lab packs or AppleTalk Network versions are available for $396.00 (1989). The publisher provides a lifetime warranty on the courseware. Permission is given to take the disk out of one computer after the program has been loaded and put it into another computer (see page 116 of the teacher's manual).

LIFE CHOICES SIMULATION

DESCRIPTION

Title: Life Choices Simulation
Author: Kathleen Cairns et al
Publisher: Institute for Computer Assisted Learning (ICAL)
Source: University of Calgary, 2500 University Dr. NW, Calgary, AB T2N 1N4
Subject: Career and Life Management
Topics: Decisions involved in lifestyle planning, career choices, values and attitudes

Version: 2.0
Display Language: English
Cost: LRDC Buyer's Guide
Tel. #: (403) 270-3303
Users: Grades 10-12

Components: 1 program disk, 1 teacher utility disk , 1 print utility disk, teacher's guide (111p.), student guide one (25p.), student guide two (24p.)

System Requirements: IBM PC/XT/AT, MS-DOS 2.0 or later, 256K, 1 or 2 disk drives, monitor, printer

Other Formats Available (not evaluated): Tandy 1000 SX, Zenith Z-150, Olivetti M24

PROGRAM DESCRIPTION

The "Life Choices Simulation" examines and compares possible futures, and develops the skills needed to actualize them. The simulation is played in a series of rounds, with each round equivalent to one year of the student's future. Value ratings and enjoyment weights, for several topics and activities, are completed on paper by the student before being transferred to the computer and may be adjusted during the simulation. A menu of employment/education choices describes each option and the consequences of its selection in terms of its impact on value categories, budget allocations and free time available. Basic budget decisions and lifestyle choices are presented and the student may purchase items such as goods and services, leisure time activities and vacation options. Feedback is provided throught a status bar that is adjusted every time a decision is made. The status bar contains numerical values that represent the effect of the decision on money, enjoyment, social esteem, health, friendship, children and free time. The teacher documentation for "Life Choices Simulation" includes an introduction, setup and configuration procedures, directions on creating and overlaying the different scenarios; a description of the factors involved and teaching suggestions. Five appendices provide information, screen displays and photocopying masters for various aspects of the program. Two student manuals are provided, one including references to sexual activity and consequences. Both manuals supply an introduction and overview, operating instructions, a general overview of the program, a description of the factors involved, directions for getting started and forms for assigning values ratings and enjoyment weightings.

PROGRAM EVALUATION

The program offers unlimited depth in the possible scenarios by setting value and enjoyment ratings for the student, and continuing the simulation for any number of "years." The range of content is appropriate for high school students. The feedback offered to students is immediate and the provision to examine and analyse results before actually making a final decision is effective. The Summary at the end of each round provides valuable assistance to the student in analysing decisions and planning choices.

The number of choices that a student must make is considerable and interaction between the teacher and students is necessary, especially in the transfer of values and enjoyment ratings from paper to computer. Generalizations are built into the simulation which can limit the depth to which a student can explore some of the choices in the program. Unfortunately there is no consideration given to a student who does not finish high school and the student will not experience any budgeting or time allocation decisions on a monthly basis. The use of different scales in each of the enjoyment ratings is somewhat confusing and the entry of all value ratings and enjoyment weights is tedious and time consuming. Sound, which is used to identify errors in input, can not be disabled and can become annoying after extended use of the program. The Print Utility disk must be used independently. The inability to save progress and exit the program at any time is a major weakness. The program does not provide explanations when students have been turned down for a job.

Teachers should be aware that the time required to fully explore the possibilities that the simulation offers is extensive and advance preparation is necessary. Students should have some background in values clarification.

STATUS

"Life Choices Simulation" has been authorized as a **BASIC** learning resource for grades 10 to 12.

PURCHASE INFORMATION

Alberta schools may purchase this program through the Learning Resources Distributing Centre; contact them for price and warranty information. Due to frequent disk interaction, this program may be used on only one computer at a time.

MAGIC SLATE

DESCRIPTION

Title: Magic Slate
Authors: Donna Stanger et al.
Publisher: Sunburst Communications
Source: P.O. Box 3240, Station F, Scarborough, ON M1W 9Z9
Subject: Language Arts
Topics: Word processor
Version: 1987 1.3
Display Language: English
Cost: LRDC Buyer's Guide
Tel. #: 1-800-247-6756
Users: Grades 2-9

Components: 1 20-column disk with backup, 1 40-column disk with backup, 1 80-column disk with backup, teacher's guide (200p.), reference manual (58p.), reference cards

System Requirements: Apple II + /IIe/IIc/IIgs, 48K, 1 or 2 disk drives, monitor, graphics printer desired, 80-column card needed for Apple IIe with 80-column version

Other Formats Available (not evaluated): Available only in Apple format

PROGRAM DESCRIPTION

This word processing package offers three formats. A 20-column version (for young students, exceptional children and the visually impaired) offers eight rudimentary functions chosen by icon: edit, load, print, new, save, delete, make and quit. The 40-column level for intermediate users adds options such as justification, underlining and a choice of type styles. An 80-column level for advanced users offers complete functions. Scrolling allows movement by line, sentence, page, or to the beginning or end of a file. Blocks of text to be moved must be delineated with beginning and end markers. The search and replace feature accommodates words or strings of up to 31 characters and allows either global searching or highlighting of the next/previous occurrence of the word(s). Files can be converted to ProDOS format for subsequent interfacing. The 40- and 80-column versions of the program offer a choice of 1- to 2 1/2-line spacing; the 20-column version offers single spacing only with characters approximately 1/2 cm in height. Justification is available only on the 40- and 80-column versions. Built-in tabs at every five spaces may be altered by the user, and pagination can be automatic or user generated. The program offers user-defined function keys that can accommodate up to 255 characters. Seven typestyles (two typestyles only for the 20-column version) are available, but printers without graphics capabilities may not print all of the typestyles.

PROGRAM EVALUATION

"Magic Slate" is user friendly, providing extensive menus that walk the student through procedures. The process of moving blocks of text involves several steps but the program can handle large moves and, in the 80-column version only, offers a split screen to enable simultaneous viewing of both the source and the destination. Because "Magic Slate" automatically saves text to disk, the amount of text that may be lost is minimized. Commands are mnemonic although some confusion arises because control sequences do different things in different modes (e.g., in edit mode, "CTRL W" sets the window; in search-and-replace, "CTRL W" places a wild card character in the string; in delete, "CTRL W" marks the next word). A well-organized teacher's guide not only contains complete instructions for operating and trouble-shooting the program, but also provides numerous writing exercises and tutorials designed to acquaint students with the features of "Magic Slate." The easy-to-use "Magic Slate Handbook" can be reproduced so students can each have a copy of program instructions. Certain features, however, severely limit the usefulness of the program for advanced users where documents longer than one or two pages may be required. Scrolling and moving text is delayed by text being loaded from the disk drive. When saving a file the program unfortunately fails to warn users if another file of the same name already exists. Having to convert files into ProDOS format before being able to use them with most spelling checkers is a definite limitation, as the process of conversion is tedious. The search-and-replace feature is efficient but tedious because of the constant need to access the disk. Unfortunately default margins can be over-ridden only through the cumbersome process of using tab stops at the beginning of each line, and if default margins are changed, all centred text appears on the left side of the screen.

STATUS

"Magic Slate" has been authorized as a **RECOMMENDED** learning resource for grades 2 to 6 and a **SUPPLEMENTARY** learning resource for grades 7 to 9.

PURCHASE INFORMATION

Alberta schools may purchase this program through the Learning Resources Distributing Centre. Contact the LRDC for pricing and warranty information. This program has the advantage of being capable of operation on more than one computer at a time; however, such use is subject to copyright laws and any licence or purchase agreement.

MASTERTYPE'S WRITER

DESCRIPTION

Title: Mastertype's Writer
Author: Learningways Inc.
Publisher: D.C. Heath Canada Ltd.
Source: #1600, 100 Adelaide Street West, Toronto, ON M5H 1S9
Subject: Language Arts
Topics: The writing process, word processor
Components: 1 program disk with backup, 1 tutorial disk, teacher's guide (54p.)
System Requirements: Apple IIe/IIc/IIgs, 128K, 1 disk drive, monitor, printer (optional)
Other Formats Available (not evaluated): Commodore 64/128

Version: 1985
Display Language: English
Cost: $159.00 (1988)
Tel. #: 1(416) 362-6483
Users: Grades 4-9

PROGRAM DESCRIPTION

Commands are mnemonic and can be accessed through either a control key combination or three different command bars that appear at the bottom of the screen when ESC is pressed. Additional onscreen help, consisting of a brief description and instructions, is available for each command. A full range of delete options is available including a filter command that allows the student to remove and restore sections of the text temporarily while editing or printing. Two documents may be loaded and edited at the same time by using the window to horizontally split the screen. Blocks of text to be moved or copied are highlighted and the program provides shortcuts to quickly move large blocks of text. The search-and-replace feature operates in forward motion only, and accommodates words or strings of up to 38 characters in length. A sort feature allows text to be sorted alphabetically or numerically. Automatic or user-generated pagination is available, and headers of up to 20 characters can be created. Students can view the printed appearance of the document, but not while in edit mode. Eight fonts are provided on the program disk, including one that uses graphic animals, and the characters can be edited. Although margin defaults can be easily changed, the program allows only four different settings to be stored. Margin settings must be changed by scrolling numbers instead of typing them in and the range of numbers offered differs with each margin setting.

PROGRAM EVALUATION

The program is easy to learn. The ability to link files, copy and move text between documents, and view the document as it will be when printed, are advantages. The colour feature emphasizes portions of text on the screen, to mark text when it is printed, and to mark portions of text for temporary removal with color filters. This feature may also be used with a black and white monitor and is displayed in patterns of dots. The provision of keyboard macros, allowing user-defined commands, is an excellent feature. Some operations are awkward. The cursor location at the bottom of the screen is distracting when editing, and deleted material cannot be recovered unless the filter has been previously used. The process of changing margins by using tab stops at the beginning of each line is cumbersome. Unfortunately, there is no provision for multicolumn documents or justification. The lack of negative paragraph indentation, footers, text hyphenation and ability to disable word wrap are program drawbacks. Files may be merged by using the add command, but there is no provision to copy files or data disk or rename files. When saving a file, the program fails to warn students if another file of the same name already exists; it simply replaces the existing file with the new file. The lack of password security is a minor drawback but files can be locked to prevent accidental deletion. The documentation is clear and well organized. Eight teaching units each introduce one or two functions, and teaching suggestions for extension activities are included. More detailed information would be helpful on formatting and printer setup, and the tutorial disk is not truly interactive; teachers should be prepared to develop extra writing activities to extend the capabilities of word processing to the writing process.

STATUS

"Mastertype's Writer" has been authorized as a **SUPPLEMENTARY** learning resource for grades 4 to 9.

PURCHASE INFORMATION

This program may be purchased for $159.00 (1988) from D.C. Heath at the address provided at the beginning of the report. Lab packs, consisting of a set of documentation and 10 sets of disks, are available for four times the price of a single package. This program may also be available locally; check with your software dealers.

The publisher will replace defective disks within two years of the date of purchase. A replacement fee of $10.00 is required and the damaged disk must be returned to the publisher.

Due to frequent disk interaction, this disk may be used with only one computer at a time.

MECC WRITER

DESCRIPTION

Title: MECC Writer
Authors: Maria Backus et al.
Publisher: MECC
Source: c/o Access, 295 Midpark Way, S.E., Calgary, AB T2X 2A8
Subject: Language Arts
Topics: The writing process, word processor
Components: 1 disk, teacher's guide (31 p.)
System Requirements: Apple IIe/IIc/IIgs, 64K, 80-column text card, 1 disk drive, monitor, printer
Other Formats Available (not evaluated): Available only in Apple format

Version: 1985
Display Language: English
Cost: Licence
Tel. #: (800) 352-8293
Users: Grades 4-9

PROGRAM DESCRIPTION

"MECC Writer" uses mnemonic commands. Screen help, including explanation and short summaries, can be accessed at any time. Scrolling can be done by line and to the beginning or end of a document. Up to 28 lines, deleted with control commands, can be retrieved. There is no move command, but it is possible to move blocks of text through the process of deleting a paragraph, moving the cursor and retrieving the paragraph at the desired position. The program will search and replace in forward motion for single words or strings of up to 30 characters. Files can be converted to DOS 3.3 format for subsequent interfacing. "MECC Write Start," "MECC Speller" and "MECC Editor" have been designed to interface with "MECC Writer."

PROGRAM EVALUATION

This program is adequate as an introductory word processing package. Small tasks such as letters, memos and simple reports can be processed. Elementary students find it easy to learn and use. The screen displays are uncluttered and closely resemble the printed copy as long as the printer margin defaults are being used. Changing margins defaults is easy enough via embedded commands, but built-in tab stops cannot be user altered. Embedded commands, such as for bold-faced print, will not make the text on the screen appear like the printed copy. The major weakness of this program is its limited power: there is no ability to right justify, to centre automatically, to make headers or footers, to print sub/superscripts, to print more than one column at a time, to print a single page or to reactivate printing from a particular place once the process has been stopped. Only single and double spacing is available, and unfortunately different line spacings cannot be accommodated within the same document. Text scrolling unfortunately does not allow for intermediate jumps by word or page. Other weaknesses include a find and replace process that must be upper/lower case-sensitive and does not allow the user to specify searches for complete words only, instead of all occurrences of a specific combination of letters. The maximum of eight printed pages may prove somewhat restricting for the more advanced writing process students. Students may be somewhat frustrated by the fact that a series of questions and menu selections must be made prior to accessing the write screen and that each time a file is to be saved, deleted or retrieved, the student must view the repertoire of existing files on the data disk, which can prove to be time consuming. Files can be easily saved, though the process is somewhat tedious. Although files can be locked and onscreen reminders prevent accidental deletion of files, there are unfortunately no prompts to prevent the user from saving a new file over an old one. When the user deliberately deletes a file, there is no onscreen verification that successful deletion has occurred. The program did hang occasionally after using the find and replace function or asking for remaining file space.

The documentation is very basic but easy to follow, and will not intimidate novice computer users: meaningful illustrations, orderly arrangement and use of lay language make it readable. Although a helpful quick reference card is included, no comprehensive index is attached. Unfortunately no suggested student activities or on-disk tutorial are available.

STATUS

"MECC Writer" has been authorized as a **SUPPLEMENTARY** learning resource for grades 4 to 9.

PURCHASE INFORMATION

MECC products are available only to those school jurisdictions that have bought their own associate licence from MECC. With the licence, schools can get the program either from their jurisdiction (if they have their own copy system) or from ACCESS, at the address listed above. Contact your jurisdiction office for more information.

MICRO SCRABBLE

DESCRIPTION

Titre: Micro SCRABBLE
Auteur: Peter Turcan
Éditeur: Leisure Genius
Source: Gessler Educational Software, 900 Broadway, New York, NY 10003
Matière: Français
Sujet: Jeu de scrabble pour ordinateur
Composantes: 1 disquette, 1 guide français (11pages), 1 guide anglais (11pages)
Matériel requis: Apple II + /IIe/IIc/IIgs, 48K, 1 lecteur de disquette, moniteur
Disponibilité sur d'autre ordinateurs (sans evaluation): C64, MAC, IBM PC

Version: 1984
Langue d'affichage: Français
Coût: 39,95 $ E.U. (1988)
Tel.: (212) 673-3113
Utilisateurs: 4e à 9e année

DESCRIPTION DU PROGRAMME

"Micro SCRABBLE" est un jeu de mots qui permet aux élèves de practiquer leur vocabulaire, sous forme de jeu de scrabble. De un à quatre élèves peuvent jouer en même temps, utilisant n'importe lesquels des quatre niveaux de difficulté qui sont offerts. L'ordinateur, qui peut être un des joueurs, a un vocabulaire de plus de 20,000 mots qui ont été choisis avec soin pour lui permettre de jouer à un niveau assez élevé. Même si l'ordinateur vérifie l'orthographe de chaque mot entre, le vocabulaire qui peut être utilisé par les élèves est sans limite car tous les mots que les élèves indiquent que l'orthographe est juste seront acceptés pour la partie. Chaque joueur a sept lettres en tout temps. Le jeu consiste d'essayer de former des mots entre-croisés, en s'appliquant à obtenir le plus grand nombre de points. Le joueur doit combiner ses lettres aux autres sur le tableau, en les plaçant dans les carrés qui ont le plus de valeur. La retroaction est immédiate. Les points sont affichés à l'écran et change continuellement pour réflecter le dernier tour. Le joueur peut accepter les points donnés, ou choisir une autre option; soit terminer le jeu, changer de lettre, manquer un tour, etc. Le programme utilise seulement des lettres majuscules. La couleur, le son et les graphiques sont presents. Le guide pour l'utilisateur contient une introduction, les règles du jeu, des exemples de mots formés et les points, le chargement du programme, les choix des options et le fonctionement du programme. Le guide anglais contient les mêmes informations.

ÉVALUATION DU PROGRAMME

La séquence et l'étendue du contenu sont satisfaisants pour la clientèle cible. Ce jeu peut motiver les élèves de niveaux très variés. La richesse du programme varie selon le temps que l'enfant joue le jeu. "Micro SCRABBLE" encourage l'élève à utiliser le nouveau vocabulaire qu'il ou elle apprend. En même temps, l'élève développe des compétences de raisonnement. C'est dommage que parfois l'ordinateur, comme joueur, utilise des mots qui ne font pas partie du vocabulaire ordinaire des enfants de la 4e à la 9e année. Par exemple, l'ordinateur peut sortir avec des mots comme: cama, acon, fats, cota ou emet. Par contre, si l'élève tape un mot qui n'est pas juste, indique à l'ordinateur qu'il est bien, le mot va être accepté et les points comptés. L'interaction avec le programme est approprié. Le fait que l'élève peut changer d'idée pendant son tour, réarranger ses lettres, changer le mot de position et contrôler la vitesse de mise en place de chaque mot est avantageux. Vue qu'un jeu peut durer assez longtemps, l'option pour sauvegarder un jeu et le reprendre plus tard, est excellente. C'est dommage que le programme n'utilise pas les lettres minuscules, ce qui nécessiterait l'emploi des charactères accentués français. Ce programme peut être jouer aussi bien sur un moniteur monochrome que sur un moniteur couleur. Il est toutefois plus facile de reconnaître si un mot ou une lettre est de valeur simple, double ou triple sur un moniteur couleur. Le son optionel n'est pas employé très efficacement. Le programme est facile à utiliser après une brève introduction aux règles du jeu. Les instructions sont assez claires et faciles à suivre. Le jeu fonctionne tel que décrit dans la documentation. C'est dommage qu'aucun système de gestion ne soit inclu dans le programme. En conclusion, même avec les faiblesses qui sont présentes dans le programme, c'est un programme qui motive les enfants à pratiquer et renforcer leur vocabulaire, et qui permet aux élèves de développer leur vocabulaire.

STATUT

"Micro SCRABBLE" est autorisé comme ressource pedagogique de statut **"SUPPLEMENTAIRE"** pour la 4e à la 9e.

ACHAT

"Micro SCRABBLE" est disponible de Gessler Educational Software, à l'adresse indique ci-haut, au coût de 39,95 $ É.U. (1988). À cause de l'interaction fréquente avec le programme, une disquette ne peut amorcer plus d'un ordinateur à la fois.

MICROTYPE, THE WONDERFUL WORLD OF PAWS

DESCRIPTION

Title: Microtype, The Wonderful World of Paws
Authors: John Haugo, Linda Hausmann and Truman Jackson
Publisher: South-Western Publishing Company
Source: c/o Nelson Canada, 1120 Birchmount Rd, Scarborough, ON M1K 5G4
Subject: Computer Literacy
Topics: Developing Keyboarding skills

Version: 1985
Display Language: English
Cost: $70.95 (1988)
Tel. #: (416) 752-9100
Users: Grades 1-6

Components: 2 disks, teacher's guide (16p.), user's guide (6p.), "Computer Keyboarding, An Elementary Course" (46p.- $16.95)

System Requirements: Apple II + /IIe/IIc/IIgs, 48K, 1 disk drive, monitor, printer (optional)

Other Formats Available (not evaluated): IBM PC/PCjr, Commodore 64

PROGRAM DESCRIPTION

This 16-lesson program develops touch keyboarding skills. Students are introduced to the computer, shown proper posture and fingering techniques, then introduced to the home row keys. Subsequent lessons begin with a review of previously learned skills, then introduce two or three new characters for practice, offer speed building practice (four drill lines presented one at a time and immediately analysed for errors), and end with a speed race presented in game format (Paw's Run). In both the lessons and the game, a cat called "Paws" guides the student's learning and provides feedback: a frowning face for incorrect entries and a smile for correct responses. A 40-column screen display is used to present information.

In the initial part of the lesson where new keys are being introduced, the keyboard is locked to prevent all but correct responses. In subsequent drills, students must achieve the target speed (Lesson 3 - 8 wpm, Lesson 16 - 22 wpm) with at least 50% accuracy before being allowed to progress. Each lesson takes 20 - 25 minutes to complete and students are expected to complete one lesson a day.

The "open screen" works like a basic word processor allowing text entry of the user's choice. Users can enter a preset time and when the time has elapsed the typed lines are shown with the elapsed time and the words per minute attained. An accompanying textbook titled "Computer Keyboarding, An Elementary Course" provides supplementary practice for each lesson and may be used for open screen typing. The teacher's guide provides objectives, instructions for operating the program, a sample lesson format, as well as several suggestions for evaluating student progress.

PROGRAM EVALUATION

When used in conjunction with the textbook, this program offers effective instruction in touch keyboarding for elementary students. Graphics are effectively used to illustrate technique and provide motivation, and "Paws" the cat proves to be a motivating teacher. Provided lessons are completed in order, the sequencing is very effective with the content broken down into very small sections and a progressive order of drills offered within each lesson. Depth, independent of the workbook, is adequate for introducing the keyboard; however, conjunctive use of the textbook is strongly recommended to build speed and accuracy skills. While posture and technique reminders are included throughout the lessons, teachers would have to monitor students to ensure that correct fingering was being used. Teacher familiarity with touch typing is not a requirement, but would certainly aid in the successful monitoring of students' techniques. The error tolerance of 50% is very generous. Students should be urged to strive for a 90% or more accuracy rate.

STATUS

"Microtype, The Wonderful World of Paws" has been authorized as a **SUPPLEMENTARY** learning resource for grades 1 to 6

PURCHASE INFORMATION

The program (including the disks, teacher's and user's guides) may be purchased for $70.95 (1988) from Nelson Canada at the address provided at the beginning of the report. The text, "Computer Keyboarding An Elementary Course" can be purchased from Nelson Canada for $16.95 (1988). The program may also be available locally; check with your software dealers. Defective disks will be replaced free of charge within a 90-day warranty period. Return the defective disks to Nelson Canada to receive the replacement. Due to frequent disk interaction, the disks may be used with only one computer at a time.

MOUSEWRITE

DESCRIPTION

Title: MouseWrite
Author: Steve Cochard
Publisher: Roger Wagner Publishing Inc.
Source: 10761 Woodside Avenue, Suite E, Santee, CA 92071
Subject: Language Arts
Topics: The writing process, word processor

Version: 2.6.8C
Display Language: English
Cost: Provincial Licence
Tel. #: (619) 562-3670
Users: Grades 4-9

Components: Three 5 1/4" disks (word processor, desk accessory, speller), one 3 1/2" disk, reference manual (150p.), tutorial manual (247p.), quick reference card

System Requirements: Apple IIe/IIc/IIgs, 128K, **enhanced IIe mandatory**, 1 disk drive, monitor, mouse (recommended), printer (optional)

Other Formats Available (not evaluated): Available only in Apple format

PROGRAM DESCRIPTION

"MouseWrite" uses a desktop setting, pull-down menus, and mnemonic commands accessed with the mouse or arrow keys. Blocks of text can be highlighted, then moved or copied within or between documents with the cut and paste commands. A buffer permits the student to undo the latest move or copy operation. The find and replace function is case-sensitive and operates in forward direction only for strings of a maximum of 30 characters in length. A "find and edit next" and "wild card" commands are available. The student may save a document at any time during the creation process by accessing the save command in the menu or by using a control key sequence. The program does not offer password security, but does provide the ability to delete files. The program will accommodate different margin settings and single, double and triple line spacings within the same document. Tab stops are indicated on an optionally displayed ruler at the top of the document window. Text formatting options include left, right, centre and full justification; indented, bulleted and hanging paragraphs; automatic footnotes; bold, underline, narrow, wide, superscripts, subscripts; and two extra text styles that allow the use of different fonts. Headers and footers are adjustable with page number, time, date and text. "MouseWrite" also offers print spooling; an option to specify a title page; and the ability to print all or selected text from a document. The program will interface with ProDOS text files, word processing (paragraph) files, and "AppleWorks" spreadsheet and database files, as well as with an Apple or any ASCII commanded modem.

PROGRAM EVALUATION

"MouseWrite" is a relatively powerful and versatile processor that offers "Mac-like" capabilities and a wide range of user friendly functions. The mouse is optional, although recommended for ease of use. The comprehensive file management system is flexible and provides easy structured procedures for students to follow, although loading time is slow and the 10-page limitation for file size may prove restrictive. It is unfortunate that the word processor cannot recover deleted text unless the cut function has been previously used. The inability to view the exact printed appearance of the document is a major weakness, although a "zoom-in" feature displays special codes. There is no provision when moving text to view both the source and the new location simultaneously. Unfortunately, the right margin cannot be adjusted without changing the entire document, and the program cannot print multicolumn documents. An expanded desktop, which requires at least 348K of memory, allows up to 12 48K documents to be opened, but unfortunately only one window can be viewed on the screen. Functions such as print spooling and the ability to work with multiple files on the desktop are not available without the extended memory. The ability to load 15 different fonts from an accessory disk is a plus; however, the use of these fonts in documents is somewhat time consuming. The mail merge, glossary (allowing definition of up to 94 keys with up to 1024 characters per key), and spell-checker features are advantages. The "MouseWrite" documentation is comprehensive, well organized and sequentially developed with excellent examples and cross references, but there are no specific lessons applicable to the writing process. Some beginning students might find the many different functions overwhelming if the tutorial alone is relied upon to introduce the word processor.

STATUS

"MouseWrite" has been authorized as a **RECOMMENDED** learning resource for grades 4 to 9.

PURCHASE INFORMATION

This program will be available from the school jurisdictions in conjunction with "The Writing Process Using the Word Processor" reference manual under a provincial licensing agreement. Contact your jurisdiction/superintendent's office for more information.

THE MUSIC CLASS: NOTE READING

DESCRIPTION

Title: The Music Class: Note Reading
Series: The Music Class
Authors: Frank Bradshaw and Virgil Hicks
Publisher: Wenger Corporation
Source: 1401 East 79th Street, Minneapolis, MN 55420-1590
Subject: Music
Topics: Reading and understanding notes

Version: 1985 Ver. 2.10
Display Language: English
Cost: $39.00 US (1988)
Tel. #: (612) 854-1288
Users: Grades 7-9

Components: 2 double-sided disks, user's guide (23p.)
System Requirements: Apple IIe/IIc/IIgs, 64K, 1 disk drive, monitor, options: a second disk drive, game paddles or joystick, ALF synthesizer card, mini headphones, auxiliary speaker and cable adapter
Other Formats Available (not evaluated): Available only in Apple format

PROGRAM DESCRIPTION

Note Reading consists of two programs. Program One contains two lessons: (a) Note Reading uses animated graphics to explore the direction sound moves in, explain how and why notes are positioned on lines and in spaces, and present the music alphabet on the treble and bass clefs and (b) Staff Note Reading tests knowledge of note positions on the Treble, Bass, Tenor and Alto clefs, and leger lines. Program Two contains four lessons: (a) Keyboard Note Reading and (b) Chromatic Keyboard Note Reading help the student to "translate" notes from treble and bass clefs and leger lines to the keyboard; (c) Keyboard Speed Reading and (d) Chromatic Keyboard Speed Reading test ability to find notes on the keyboard at a speed set by the student. Sound (which cannot be disabled) represents musical notes and illustrates concepts of ascending and descending scales. Students can move forward or backward through the tutorial. Negative feedback, given at each incorrect entry, informs the student why the indicated response is incorrect. An arrow key indicates the direction the student should move on the keyboard for the correct answer. Scores maintained in the drill-and-practice lessons indicate the number of correct or incorrect answers. Quantitative feedback provides the student with a raw score and a percentage at the end of the lesson. A Manager Utility stores scores and names (also passwords) for up to 125 students. The teacher can turn the record keeping system off, view or print any or all scores, maintain a Hall of Fame list that records the top 20 scores, and transfer names and passwords between disks in The Music Class Series. (Two disk drives are required to use the transfer names option). The teacher documentation briefly describes lesson content and options, program operation and the functions of the Manager Utility.

PROGRAM EVALUATION

The program is relatively easy to implement and use in the classroom. The sequential progression and the small incremental steps through the lessons are effective in presenting note reading basics and practical application. Although the range of content covers the full musical scale, content is limited to practice using individual notes, with no coverage of chords, triads or intervals. However, the depth of practice offered to the student in note reading is unlimited with the exception of the tutorial. Manipulation of the keyboard to enter the correct notes in the timed speed-reading lesson is very difficult when the faster speeds are chosen. Questions are generally effective but are not randomized in the tutorial, limiting the extent to which this lesson can be used to deal with individualized student needs. Feedback is immediate and provides some corrective information. The correct answer is not provided to the student and he or she must continue entering responses until the correct answer is obtained. This can be frustrating to the student who does not understand the concept and encourages guesswork rather than practice. The teacher documentation is clear, providing the necessary information to operate the program. However, the description of the Manager Utility functions is minimal and does not provide enough detail for the teacher, and it is unfortunate that teaching strategies and ideas for implementation are not included.

STATUS

"The Music Class: Note Reading" has been designated as a **SUPPLEMENTARY** learning resource for grades 7 to 9.

PURCHASE INFORMATION

This program may be purchased for $39.00 US (1988) from Wenger Corporation at the address provided at the beginning of the report. It may also be available locally; check with your software dealers. Defective disks will be replaced upon return of the damaged disks to the publisher. Due to frequent disk interaction this program may be used with only one computer at a time.

THE MUSIC CLASS: RHYTHM

DESCRIPTION

Title: The Music Class: Rhythm
Series: The Music Class
Authors: Frank Bradshaw and Virgil Hicks
Publisher: Wenger Corporation
Source: 1401 East 79th Street, Minneapolis, MN 55420-1590
Subject: Music
Topics: Learning basic rhythms, creating rhythmic patterns
Components: 2 double-sided disks, user's guide (21p.)
System Requirements: Apple IIe/IIc/IIgs, 64K, 1 disk drive, monitor, options include a second disk drive, game paddles or joystick, ALF synthesizer card, mini headphones, auxiliary speaker and cable/adapter
Other Formats Available (not evaluated): Available only in Apple format

Version: 1985 Ver. 2.10
Display Language: English
Cost: $39.00 US (1988)
Tel. #: (612) 854-1288
Users: Grades 7-9

PROGRAM DESCRIPTION

"Rhythm" consists of four levels of rhythmic content: the first introduces quarter, half and whole notes; the second adds eighths; the third, dotted notes; the fourth, sixteenths. Each of the four levels consists of two lessons. The first lesson in each level, Mr. Metro Gnome I-IV, uses sound, graphics and animation to introduce the concepts of pulse, rhythm and tempo. The tutorial introduces the notes being studied and helps students experiment with basic rhythms involving these notes. The challenge section allows the student to create and perform rhythmic patterns. The written quiz consists of seven questions that test students on terminology and concepts. The rhythm quiz asks the student to tap six different rhythmic patterns. The second lesson in each level, Rhythm I-IV, gives the student practice in reading and performing rhythms using the notes previously learned. The computer displays rhythmic patterns and the student must tap each rhythm correctly before advancing to the next rhythm. Immediate feedback is provided throughout the program whenever the student is asked to respond to a question or tap out a rhythmic pattern. Negative feedback prompts the student to carefully examine the pattern and try again. Quantitative feedback is provided at the end of each lesson and gives the student a raw score and a percentage. A Manager Utility with capacity for up to 125 records helps teachers track the student's progress through the tutorials and exercises. This utility stores student names and passwords; student scores for the tutorials, exercises, and drill-and-practice sessions; and enables the teacher to print any or all scores, change the preset scoring standards, and set the level of difficulty for an entire group of students.

PROGRAM EVALUATION

This program provides good sequential development in basic rhythmic patterns and reinforces both aural and visual recognition tasks. The progression through the four levels of content and the small incremental steps between each level are effective in presenting the content. The program is limited by its basic coverage of content (quarter, half, whole, eighth, dotted and sixteenth notes) as well as the lack of randomization in the questions. A student must repeat a question until he or she responds correctly, a process of questionable educational value since there is no corrective feedback or branching to meet individual student needs. This lack of remediation combined with the limited depth of practice make this program suitable only as an introduction to rhythmic patterns. The use of the space bar to tap rhythmic patterns can sometimes cause difficulty, especially in the rhythm lessons, as the student is marked incorrect if he or she is a fraction too fast or slow. This becomes very frustrating as the question is repeated until the student taps in precise time. The program is relatively easy to implement and use in the classroom. Quantitative feedback is adequate, and animated graphics and sound are effective in presenting the concepts. The teacher documentation is brief but clear, providing adequate information to operate the programs: a description of content and options for each of the lessons, a help section and instructions for the Manager Utility, though these are minimal. It is unfortunate that teaching and learning strategies as well as ideas for implementation are not included.

STATUS

"The Music Class: Rhythm" has been designated as a **SUPPLEMENTARY** learning resource for grades 7 to 9.

PURCHASE INFORMATION

This program may be purchased for $39.00 US (1988) from Wenger Corporation at the address provided at the beginning of the report. It may also be available locally; check with your software dealers. Defective disks will be replaced upon return of the damaged disks to the publisher. Due to frequent disk interaction, this program may be used with only one computer at a time.

MUSIC THEORY

DESCRIPTION

Title: Music Theory
Author: Linda Barry
Publisher: MECC
Source: c/o ACCESS, 295 Midpark Way S.E., Calgary, AB T2X 2A8
Subject: Music
Topics: Musical rhythm, pitch, scales, chords, terms and notation
Components: 1 disk, teacher's guide (126p.)
System Requirements: Apple II + /IIe/IIc/IIgs, 48K, 1 disk drive, monitor
Other Formats Available (not evaluated): Available only in Apple format

Version: 2.1
Display Language: English
Cost: Licence
Tel. #: (800) 352-8293
Users: Grades 7-9

PROGRAM DESCRIPTION

This program consists of an introduction demonstrating the capabilities of the Apple as used in the lessons, and 17 lessons divided into three main groups:

1. Terminology: Name the Note, Enharmonics, Key Signatures and Terms
2. Rhythm: Note Types, Counting, Rhythm and Rhythm Play
3. Pitch: Interval Recognition (aural and visual), Sight and Sound (Missing Note, Wrong Note), Scales (Whole-Half, Find the Half, Scales) and Chords (Triads, Sevenths).

Multiple choice questions or short answer questions are generated randomly from large data banks. Different levels of difficulty are included in many of the lessons, and teachers may set up individualized sequences of lessons based on student needs. Once into a lesson, the student cannot escape to the menu. Questions answered incorrectly will be repeated throughout the drill. Quantitative feedback provided at the end of a drill indicates the number of questions attempted, the number correct, the percentage and the number of times the melodies were repeated. No branching or pre- and post-tests are included.

PROGRAM EVALUATION

This program offers effective drill and practice in basic concepts of music theory and ear training. The suggested sequence of the lessons (nine progressive levels of difficulty), effective randomization of questions, and the variable depth of practice are valuable features. The program can be customized to the student's needs: a limitless number of questions can be generated. Incremental steps between the lessons and within the sequence are good. However, the program is strictly a drill. No instruction is provided, and therefore students will need prior classroom instruction in the music theory concepts. Feedback is immediate and with some corrective information. However, the student is not given enough chances to enter an answer before being given the correct response, and no remedial information is provided with the answer. The program is easy to use and requires little computer competency on the part of the teacher. The teacher documentation is comprehensive, offering detailed program descriptions (background information, lesson objectives, a recording sheet for the student and sample runs) as well as instructional suggestions. Unfortunately, no management system is included to allow the teacher to review and evaluate student progress in the various skills.

STATUS

"Music Theory" has been authorized as a **BASIC** learning resource for grades 7 to 9 in instrumental music and as a **RECOMMENDED** learning resource for grades 7 to 9 in choral music.

PURCHASE INFORMATION

MECC products are available only to those school jurisdictions that have bought their own associate licence from MECC. With the licence, schools can get the program either from their jurisdictions (if they have their own copy system) or from ACCESS at the address listed above. Contact your jurisdiction office for more information.

Due to frequent disk interaction, this program may be used with only one computer at a time.

MUSIC THEORY – LEVEL I

DESCRIPTION

Title: Music Theory – Level I
Series: Maestroscope Music Theory
Author: Sharon Lohse Kunitz
Publisher: Maestro Music Inc.
Source: 2403 San Mateo NE, Suite P-12, Albuquerque, NM 87110
Subject: Music
Topics: Note names, note value, counting, rhythm, dynamics, tempo, time signatures, measures
Components: 3 disks, teacher's guide (16p.), score sheets (3)
System Requirements: Apple II + /IIe/IIc/IIgs, 48K, 1 disk drive, monitor
Other Formats Available (not evaluated): Available only in Apple format

Version: 1985
Display Language: English
Cost: $150.00 US (1988)
Tel. #: (505) 881-9181
Users: Grades 7-9

PROGRAM DESCRIPTION

This program presents 18 lessons in reading music. Each lesson has five to nine sections consisting of tutorials, exercises and tests, and requires approximately 20 minutes to complete. Topics covered include: note names and identification on the treble and bass staffs; whole, half, quarter, and dotted half notes; quarter-note rests; four-four, three-four, two-four and five-four time signatures; ties; sharps and flats; basic dynamics and music terms; basic ear-training and optional lessons in keyboard hand placement and fingering. The lessons develop progressively from simple to more difficult, each lesson beginning with a review of the previous lesson. The correct answer is provided after three incorrect responses. In some lessons, prompts are provided after each incorrect response. Quizzes within each lesson and three major tests (lessons 6, 12 and 18) are provided for evaluation. The documentation provides instructions for program operation, a basic course outline and student record sheets with certificates. No other support materials are provided.

PROGRAM EVALUATION

The program is intended for beginners in music and does not assume any competency. The sequence is developed effectively with small incremental steps. Adequate depth is provided with sufficient practice and review to provide reasonable skill development in any of the areas covered. The lessons are motivational, with a wide variety of questioning techniques, excellent graphics and sound (melodies that appear on the screen are played and pitches are generated for ear-training purposes). A special feature allows audio output to be directed to a cassette, headphone or a separate speaker system. The manner in which text is "typed" on the screen—one character at a time with a ticking sound that cannot be disabled—is slow and somewhat annoying. Text erasure is also slow. There is no way to select a specific part of a lesson or return to complete an unfinished lesson. Feedback is adequate but more variety would be beneficial. It would be helpful to have remedial branches available to the student having difficulties. The quantitative feedback, providing the user's raw score and/or a percentage, is useful to the student. However, it is unfortunate that a management system is not provided to record, update and save student records for teacher use at a later date. The teacher documentation is easy to understand, but could be more detailed in outlining the content of each lesson. This program can be used readily by a teacher with little computer competency and will require minimal supervision.

Two technical flaws exist in the second edition. When using a colour monitor, the black keyboard keys are displayed in white and the white keys in black while the text of the tutorial portrays the true colours of the conventional keyboard. The second flaw is a subtlety the teacher should be aware of. When a student taking an examination presses CRTL-E to view his/her test results and then RETURN to continue the test, she/he is presented with a new random question. This provides the student with a strategy to avoid the questions she/he does not know the answer to without suffering the consequence of a recorded wrong answer.

STATUS

"Music Theory – Level 1" has been authorized as a **SUPPLEMENTARY** learning resource for grades 7 to 9.

PURCHASE INFORMATION

This program is available for $150.00 US (1988) from Maestro Music Inc. at the address provided at the beginning of the report. Backup disks may be purchased for $25.00 US (1988) and student record cards are available for $3.50 US for a pack of 25. Maestro Music also has a site licensing program; contact them for details. This program may be available locally; check with your software dealers. Defective disks will be replaced upon return of the disk plus a fee of $7.00 US. These disks are capable of operation in more than one computer at a time; however, such use is subject to copyright laws and any licence or purchase agreement.

MUSIC THEORY – LEVEL II

DESCRIPTION

Title: Music Theory – Level II
Series: Maestroscope Music Theory
Authors: Sharon Kunitz and Jeffrey Foster
Publisher: Maestro Music Inc.
Source: 2403 San Mateo NE, Suite P-12, Albquerque, NM 87110
Subject: Music
Version: 1984
Display Language: English
Cost: $150.00 US (1988)
Tel. #: (505) 881-9181
Users: Grades 7-9
Topics: Intervals, major scales, major key signatures, major and minor seconds, thirds and triads, transposition
Components: 3 disks, teacher's guide (16p.), student record cards (15)
System Requirements: Apple II + /IIe/IIc/IIgs, 48K, 1 disk drive, monitor
Other Formats Available (not evaluated): Available only in Apple format

PROGRAM DESCRIPTION

This program continues the principles and instructional approach introduced in "Music Theory – Level I," and assumes that students have a thorough working knowledge of note names on the grand staff and note values. Topics covered in the 18 progressive lessons include identification of intervals, interval ear training, major scales, chromatic scales, major key signatures, circle of fifths, major and minor triads, I – IV – V chords, common time/cut time, the fermata, the dotted quarter note, more basic music terms and transposition. Each lesson requires about 25 minutes: a 20-question review is followed by new material presented in textual tutorials and drill-and-practice. Sound is produced to play notes in the ear-training segments, and a special feature allows audio output to be directed to headphones. Students identify notes and intervals, or sometimes raise/lower notes and symbols to their correct location on the staff. Simple prompts are offered (go up, go down, etc.) and the correct response is provided after the third attempt. Questions in the tutorial sections have a fixed sequence, but there is some randomization in the reviews. Quantitative feedback keeps a running tally of the number right and wrong. Two tests and a final examination evaluate the student's progress through the program. The teacher documentation describes the basic features and operation of the program, outlines the lesson topics and provides student certificates and record-keeping sheets.

PROGRAM EVALUATION

This program offers good depth of coverage in each section, sufficient examples and frequent questions distributed throughout the tutorials. An annoying feature is the "typing" of text across the screen complete with a ticking sound, which is distracting for the user trying to learn the new concepts being presented. Questioning techniques are generally appropriate and varied enough to keep the student's interest. However, the feedback lacks imagination and variety; the negative feedback provides little assistance. Quantitative feedback is minimal with no information regarding specific areas of weakness. Although students are able to repeat an inadequately mastered lesson, the program does not provide any branches for remediation. No help screens are available. Although sound is an appropriate component of the ear-training, pitches might be played too rapidly for some students. Curiously, the black keyboard keys are displayed in white and the white keys in black. A subtlety the teacher should be aware of is that when a student taking an examination presses CRTL-E to view his/her test results and then RETURN to continue the test, she/he is presented with a new random question. This provides the student with a strategy to avoid the questions she/he does not know the answer to without suffering the consequence of a recorded wrong answer. The lack of a management system is a weakness. The program unfortunately cannot save data on student progress or lessons completed. The documentation is skimpy but adequate; it is unfortunate that some support materials are not provided for student use. However, the program is comprehensive, easy to use, requires little teacher assistance or supervision, and can be implemented easily in the classroom.

STATUS

"Music Theory – Level II" has been authorized as a **SUPPLEMENTARY** learning resource for grades 7 to 9.

PURCHASE INFORMATION

This program is available for $150.00 US (1988) from Maestro Music Inc. at the address provided at the beginning of the report. Backup disks may be purchased for $25.00 US (1988) each and student record cards are available for $3.50 US for a pack of 25. Maestro Music also has a site licensing program; contact them for details. This program may be available locally; check with your software dealers. Defective disks will be replaced upon return of the disk plus a fee of $7.00 US. These disks have the advantage of being capable of operation in more than one computer at a time; however, such use is subject to copyright laws and any licence or purchase agreement.

MUSIC THEORY – LEVEL III

DESCRIPTION

Title: Music Theory – Level III
Series: Maestroscope Music Theory
Authors: Sharon Kunitz and Paul Marshall
Publisher: Maestro Music Inc.
Source: 2403 San Mateo NE, Suite P-12, Albquerque, NM 87110
Subject: Music
Topics: Intervals, triads, scale degrees, minor key signatures, syncopation, double sharps and flats, melodic, harmonic and natural scales

Version: 1985
Display Language: English
Cost: $170.00 US (1988)
Tel. #: (505) 881-9181
Users: Grades 7-9

Components: 4 disks, teacher's guide (16p.),15 score sheets
System Requirements: Apple II + /IIe/IIc/IIgs, 48K, 1 disk drive, monitor
Other Formats Available (not evaluated): Available only in Apple format

PROGRAM DESCRIPTION

This program consists of 18 progressive lessons that continue the format and concepts introduced in previous disks from the same series, "Music Theory – Levels I and II." Students should be able to read note pitches and values competently and be familiar with the material taught in the two previous levels of the series: key signatures, time signatures, scales, major and minor intervals and basic triads. The topics covered include reviewing intervals; chromatic, augmented and diminished intervals; inversions of triads; scale degrees; minor key signatures; syncopation; double sharps and double flats; triple time and the dotted quarter note; and melodic, harmonic and natural minor scales. Each lesson requires about 30 minutes: a 20-question review is followed by new material presented in tutorials and drill-and-practice. Sound is produced to play notes in the ear-training segments, and a special feature allows audio output to be directed to headphones. Questions in the tutorial sections have a fixed sequence, but there is randomization in the reviews. Simple prompts are offered and the correct response is provided after the third attempt. Lessons 6, 12, and 18 consist of final examinations to evaluate the student's progress. Quantitative feedback provides a running tally of the number of responses correct and incorrect. The teacher documentation describes the basic features and operation of the program, outlines the lesson topics and provides student certificates and record-keeping sheets. Some information is also included regarding keystrokes used to name notes and symbols and move the cursor.

PROGRAM EVALUATION

This program offers good depth of coverage in each section, with small incremental steps and logical sequence, sufficient examples and frequent questions distributed throughout the tutorials. Some difficult concepts, such as augmented and diminished intervals, are well covered. An annoying feature is the "typing" of text across the screen complete with a ticking sound, which is distracting for the user trying to learn the new concepts being presented. Questioning techniques are generally appropriate and varied enough to keep the student's interest. Quantitative feedback is minimal with no information regarding specific areas of weakness. Students are able to review portions of a lesson or repeat an inadequately mastered lesson. However, the program does not provide any branches for remediation and no help screens are available. Although sound is an appropriate component of the ear-training, pitches might be played too rapidly for some students. Curiously, the black keyboard keys are displayed in white and the white keys in black. A subtlety that the teacher should be aware of is that when a student taking an examination presses CRTL-E to view his/her test results and then RETURN to continue the test, she/he is presented with a new random question. This provides the student with a strategy to avoid the questions she/he does not know the answer to without suffering the consequence of a recorded wrong answer. The lack of a management system is a weakness. The program unfortunately cannot save data on student progress or lessons completed. The documentation is skimpy but adequate; it is unfortunate that some support materials are not provided for student use. However, the program is comprehensive, easy to use, requires little teacher assistance or supervision, and can be implemented easily in the classroom.

STATUS

"Music Theory – Level III" has been authorized as a **SUPPLEMENTARY** learning resource for grades 7 to 9.

PURCHASE INFORMATION

This program is available for $170.00 US (1988) from Maestro Music Inc. at the address provided at the beginning of the report. Backup disks may be purchased for $25.00 US (1988) each and student record cards are available for $3.50 US for a pack of 25. Maestro Music also has a site licensing program; contact them for details. This program may be available locally; check with your software dealers. Defective disks will be replaced upon return of the disk plus a fee of $7.00 US. These disks have the advantage of being capable of operation in more than one computer at a time; however, such use is subject to copyright laws and any licence or purchase agreement.

PRACTICAL THEORY: COMPLETE

DESCRIPTION

Title: Practical Theory: Complete
Author: Sandy Feldstein
Publisher: Alfred Publishing (Canada) Ltd.
Source: 300 - 1305 Pickering Parkway, Pickering, ON L1V 3P2
Subject: Music
Topics: Beginning rudiments to elementary harmony
Components: 6 disks, student workbook (96p.), pamphlet with directions for use
System Requirements: Apple II + /IIe/IIc/IIgs, 64K, 1 disk drive, monitor
Other Formats Available (not evaluated): IBM PC, Commodore 64

Version: 1984
Display Language: English
Cost: LRDC Buyer's Guide
Tel. #: (416) 839-8541
Users: Grades 7-9

PROGRAM DESCRIPTION

This program, which uses six disks in conjunction with a workbook, presents concepts, drill-and-practice, and review exercises in music theory rudiments. The content is divided into three volumes of two disks each. Three to four units of four lessons each are presented per disk, for a total of 21 units or 84 lessons:

Volume I: musical staff; pitch names; treble and bass clefs; whole, half and quarter notes; bar lines; measures; time signatures; grand staff; leger lines; dotted half notes; ties and slurs; repeat signs; dotted quarter notes; half steps; flats; sharps and naturals.

Volume II: the octave; whole and half steps; the chromatic scale; major scales; key signatures; major keys and relationships by fifths; common musical terms and symbols; sixteenth notes and rests; dotted eighth notes; intervals; syncopation; triple groupings.

Volume III: major triads; major chords within a key; chord progressions; chord inversions; dominant seventh chords; minor chords within a progression; transposition of altered tones; relative minor keys; natural, harmonic and melodic minor scales; passing and neighbour tones; composing; harmonizing a melody; minor chord progressions.

The sequence within a unit is program controlled, but the user may choose the specific topic to be studied. The rate is user controlled throughout the program. Quantitative feedback presents a continuous tally of the number of questions correct, the number attempted in all, and the number left to do. At the end of the review, the program indicates the total number of questions attempted in order to achieve 10 consecutive correct entries. The documentation includes a pamphlet describing the content and use of the disks and lessons. There is no management system included with the program.

PROGRAM EVALUATION

This program provides a very comprehensive range of topics in a systematic and effective manner. The sequence (easy to difficult) and small incremental steps of the lessons are excellent. Optional sound (note pitches) is a very effective ear-training aid for the student user. The disks and the student workbook present slightly different information, and the teacher should be prepared to develop a method to integrate these two elements for effective classroom use. A comprehensive 96-page student workbook presents well-organized instruction and questions (with answers in the back) correlated with the sequence of the disk content. The depth of instruction is minimal: the program often assumes that the student already knows the concepts and the type of answer to input. The program sometimes provides inadequate instructions for entering responses. Therefore, the teacher must supplement with classroom instruction in both concepts and program use. The lack of a teacher's guide with lesson plans and strategies for integrating the textual and computerized components of the material is a weakness. Sufficient practice is provided for the student, but more user or teacher control over the amount and type of practice material would be helpful. To practice extensively, the student must repeat the same exercises rendering the task very repetitive even for the randomized activities, as the data banks are rather limited. Some corrective feedback is provided, but unfortunately particular areas of student weakness are not indicated.

STATUS

"Practical Theory: Complete" has been authorized as a **BASIC** learning resource for grades 7 to 9.

PURCHASE INFORMATION

Alberta schools may purchase this package from the Learning Resources Distributing Centre for the following prices: a) the complete set of student text/workbooks volumes 1 to 3 for $10.65 less a 25% subsidy discount and b) the complete set of six disks volumes 1 to 3 with the pamphlet for $256.45 less a 25% subsidy discount. Defective disks will be replaced within a 60-day warranty period upon return of the defective disk direct to Alfred Publishing. This disk can operate in more than one computer at a time provided only one unit is accessed; however, such use is subject to copyright laws and any licence or purchase agreement.

QUEST FOR CANADA

DESCRIPTION

Title: Quest for Canada
Series: Canadian History Simulations
Author: Entrex Software
Publisher: Scholastic Inc.
Source: 123 Newkirk Road, Richmond Hill, ON L4C 3G5
Subject: Social Studies
Topics: Simulation of the exploration and settlement of Upper and Lower Canada
Components: 3 disks, teacher's guide (52p.)
System Requirements: Apple II + /IIe/IIc/IIgs, 64 or 128K, 1 or 2 disk drives, monitor
Other Formats Available (not evaluated): IBM PC, Commodore 64/128

Version: 1987
Display Language: English
Cost: $129.00 (1989)
Tel. #: (800) 268-3860
Users: Grade 5

PROGRAM DESCRIPTION

This simulation allows students to lead an expedition by canoe and on foot into Canada. The object is to claim Canada by conquering at least 14 areas. Students select people and provisions, plan routes, attack enemy forts, establish settlements, hunt and trade, and cope with obstacles posed by weather, natives, dwindling food supplies, waterfalls, etc. The line of travel is graphically shown on the screen along with a picture representing the group's travel. Onscreen help includes maps, a compass, strategic "advice," a status "report" function and a bar graph representing the supplies remaining. Points and provisions are earned for distance covered, areas claimed and questions correctly answered. Two modes are available: "Coureur de Bois" for grades 5 to 7 and "Voyageur" for grades 8 to 10. Options include the "Explorer's Notebook" (multiple-choice questions which the student must answer before proceeding), "Topics" (historical, geographical and general information, and "Words" (a glossary of terms and background information). Teachers can modify the questions presented to the students, and can print out the "Topics" so that students can access reference information in hard copy. Student games can be saved, and a record-keeping system allows teachers to check individual student scores for the simulations (areas claimed, travel distance and time, questions correctly answered, etc.). Documentation includes full instructions and strategy tips for using the simulation and options, as well as lesson plans, maps, six assignment sheets, and a 30-question multiple choice post-test.

PROGRAM EVALUATION

This simulation presents a wealth of geographical and historical information in a challenging problem-solving format. Students must use mapping skills to determine their location and plan travel routes, as well as strategy formulation and decision-making skills to define and test strategies, examine alternatives, implement a plan of action and evaluate the decisions. Students also develop research skills, as they must search for, select and apply information available in a variety of forms (graphs, maps, textual status reports, compass readings) to make decisions. The situations presented to the student recreate the difficulties faced by the explorers in a realistic manner. The "Explorer's Notebook" questions are generated by a limited data bank, are somewhat irrelevant to the actual simulation and students can easily guess without attempting to think or reference the "Topics" section. Graphics are limited although useful in presenting necessary information.

The game is very complex, and the teacher will need to spend considerable time to learn the program. Students also require considerable time to become sufficiently familiar with the options and information to attain the program objectives. The goal of claiming 14 areas is too abstract for most Grade 5 students. Teachers should be prepared to assist students extensively in the initial stages of learning the program.

Teachers should also be aware that the basic value underlying the simulation is competition for gain and domination, involving conquering territory and attacking when necessary. This accurately reflects the spirit of 17th-century exploration, but teachers may want to help students examine these values critically.

If used appropriately, this program has potential to be motivating and highly effective in developing a wide range of skills. "Quest for Canada" is intended to be used as enrichment for Grade 5 students requiring greater challenge.

STATUS

"Quest for Canada" has been authorized as a **SUPPLEMENTARY** learning resource for grade 5 social studies.

PURCHASE INFORMATION

This program may be purchased for $129.00 (1989) from Scholastic Inc. at the address given at the beginning of the report. It may also be available locally; check with your software dealers.

THE ROYAL RULES

DESCRIPTION

Title: The Royal Rules
Authors: Thomas O'Brien and Raoul Watson
Publisher: Sunburst Communications
Source: P.O. Box 3240, Station F, Scarborough, ON M1W 9Z9
Subject: Mathematics
Topics: Forming and testing hypotheses, recognizing numerical patterns and relationships
Components: 1 program disk with backup, 1 data disk, teacher's guide (43p.)
System Requirements: Apple II + /IIe/IIc/IIgs, 64K, 1 disk drive, colour monitor preferred
Other Formats Available (not evaluated): IBM PC/PCjr, Tandy 1000

Version: 1986
Display Language: English
Cost: $100.00 (1989)
Tel. #: (800) 247-6756
Users: Grades 7-9

PROGRAM DESCRIPTION

This program is designed to form and test hypotheses while building skills in recognizing numerical patterns and relationships. It will also help students develop skills in critical thinking and problem solving through the use of a fantasy game format. Content, sequence and rate are user controlled. There are four levels of mathematical rules and supporting examples that are presented from a limited data bank. Although students may enter the program at any level, it is recommended that all students begin by working through the first level. After choosing a level, students are shown three numbers that correspond to a mathematical rule. Students must hypothesize and test their solutions to find the rule. After passing three quizzes the students may enter their own rules and save them on a data disk. Although there is no management system, the teacher may enter rules at any time by using the Change Options (CONTROL-T) provided in the program. In addition, this option allows the teacher to control sound, turn the rule option on/off, view the rules created by the students, delete player rules and prepare or copy a data disk.

Student interaction consists of menu selection and numerical inputs to test hypotheses. At any time while testing the hypotheses, the student may access the help (H) option to receive a new set of numbers that also fit the rule, and/or they can choose R to recap their previous guesses. Text appears in several size combinations using upper and lower case letters. Graphics, colour and sound are used. The 34-page teacher's guide provides an overview with objectives; a program description; explanations of difficulty levels, creating rules, and change options; suggestions for classroom use; observations from field testing; and warranty information. No entry competencies are specified.

PROGRAM EVALUATION

The effectively sequenced content and readability are appropriate for the target audience. Students will require only a minimal amount of supervision. Some levels may be too challenging for some students, and the teacher should monitor at least the beginning level in order that students not begin at a level that is too challenging. The fact that the teacher/student may create rules is an added strength.

This program encourages the development of a risk-taking attitude that relies on higher cognitive abilities required for the improvement of hypothesis development and critical thinking. It encourages students to gather and organize information, construct mathematical formulas and make judgments. Though the program is not instructional, it provides ample opportunity for students to formulate and test hypotheses. Student interaction is effective with the students actively and easily interacting in an interesting learning experience. The feedback is appropriate for the intent of the program. The help option provides additional hypothesis testing for students who are unable to determine the rules successfully.

The teacher documentation is well organized and easy to use. This program can be used by a teacher with minimum computer competency. Colour and graphics add interest and strength to the program, but the program can also be used effectively on a monochrome monitor. The major weakness of the program is that the disk is usable on only one computer at a time.

STATUS

"The Royal Rules" has been authorized as a **SUPPLEMENTARY** learning resource for grades 7 to 9.

PURCHASE INFORMATION

This program may be purchased for $100.00 (1989) from Sunburst Communications at the address provided at the beginning of the report. Lab packs, containing the teacher's documentation and 10 disks, may be purchased for $300.00 (1988). This program may be available locally; check with your software dealers. Sunburst Communications will replace, free of charge, any disk that is defective or is damaged during normal school use.

SCHOLASTIC MULTISCRIBE

DESCRIPTION

Title: Scholastic MultiScribe
Author: StyleWare Inc.
Publisher: Scholastic Inc..
Source: 123 Newkirk Road, Richmond Hill, ON L4C 3G5
Subject: Language Arts
Topics: The writing process, word processor

Version: 1987
Display Language: English
Cost: LRDC Buyer's Guide
Tel. #: (800) 268-3860
Users: Grades 4-9

Components: 1 program disk with backup, 1 spelling dictionary disk, 1 picture manager disk, 1 activity disk, 1 picture disk, teacher's guide (47p.), activity book (91p.), user's manual (342p.), picture manager book (76p.)

System Requirements: Apple IIe/IIc/IIgs, 128K, 1 disk drive, monitor, printer, mouse (optional)
Note: Display must be on monochrome for the IIgs

Other Formats Available (not evaluated): Available only in Apple format

PROGRAM DESCRIPTION

This word processing package has pull-down menus accessed with the mouse or keyboard, and some commands have mnemonic equivalents. Scrolling by line, page or to any specified point in the document is possible. Blocks of text can be moved or copied via the clipboard by highlighting. Text can be deleted by character, word, line, paragraph or document. Search and replace in forward motion is available for words, parts of words or strings of up to 43 characters, and may be case-sensitive. Documents may be saved at any time during document creation. A warning reminds users to save their changes and prevents accidental deletion of files by requesting confirmation of file deletion commands. Built-in defaults for margins, line spacings (single, double, triple, or 0), 10 tab stops, headers, footers and paragraph indentations, including negative indentations, can be user altered. The user can re-format a document at anytime during document creation and different margins and line spacing can be accommodated within the same file with the aid of the optionally displayed ruler. Centring between margins is accomplished via the ruler. Left, right or full justification and automatic pagination are available. Special features include a Picture Manager allowing space saving and text insertion next to icons; a "Michelangelo" font allowing the creation of pictograms and pictographs; a built-in spelling checker and a 50,000 + word dictionary to which words can be added. Nine fonts, each available in six sizes, and 11 styles are available. The user can change text from upper to lower case and vice versa without re-keying, and can design his or her own specific font with the aid of the FontEditor. Only horizontal lines can be printed, and spooling is provided through the use of the print merge command.

PROGRAM EVALUATION

"Scholastic MultiScribe" contains many enhancements to motivate students' creativity, and is suitable for a wide range of users: visually impaired, foreign language and advanced users, with its flexibility in fonts, print size and specially designed fonts. A major advantage is that what you see on the screen is what you get on the printout, except for right and centre justification. The interfacing abilities with files from other programs such as "AppleWorks," "Bank Street Writer III," and other ProDOS word processors are helpful. A weakness is that users must become familiar with the documentation in order to use certain editing features. For most editing and revision tasks during the writing process, the resident buffer is more that adequate. It is unfortunate that text removed with the DELETE key can not be recovered. Although text can be moved easily within a document and between files, it is not possible to simultaneously view the source and the destination. The lack of password security and/or the ability to lock files is a minor drawback. Unfortunately for users with one disk drive, the system master disk must remain in the disk drive during most operations, and some word processing functions are slow. Some difficulties were occasionally experienced inserting/hiding the ruler, and both multicolumn documents and superscripts/subscripts are cumbersome. The documentation is very useful: descriptive, easy to read, well illustrated with sample screen displays, and containing comprehensive indexes.

STATUS

"Scholastic MultiScribe" has been authorized as a RECOMMENDED learning resource for grades 4 to 9.

PURCHASE INFORMATION

Alberta schools may purchase this program from the Learning Resources Distributing Centre. Check the LRDC Buyer's Guide or contact them at 427-2767 for price and warranty information. Due to frequent disk interaction, this program may be used with only one computer at a time.

STICKYBEAR TOWN BUILDER

DESCRIPTION

Title: Stickybear Town Builder
Authors: Richard Hefter and Dave Lusby
Publisher: Weekly Reader Family Software
Source: 10 Station Place, Norfolk, CT 06058
Subject: Social Studies
Topics: Map reading, compass reading, positioning and directions
Version: 1984
Display Language: English
Cost: LRDC Buyer's Guide
Tel. #: (203) 638-2400
Users: Grade 2
Components: 1 disk, user's guide (16p.), 1 Stickybear poster, 1 sheet of Stickybear stickers
System Requirements: Apple II + /IIe/IIc/IIgs, 48K, 1 disk drive, colour monitor recommended, joystick (optional)
Other Formats Available (not evaluated): Commodore 64/128

PROGRAM DESCRIPTION

This program develops problem solving skills through map and compass reading, locating cardinal and intermediate directions, calculating relative distances and relating scale models to reality. Activities include:

1. BUILD A TOWN - Students convert a grass field and trees to a town by strategically arranging the objects shown at the bottom of the screen (gas station, bridge, park, ferris wheel, etc.)
2. SAVE A TOWN - The constructed town is assigned a name and saved for subsequent games.
3. LOAD A TOWN - Students choose and load a file for games 4 and 5.
4. TAKE A DRIVE - Given a full tank of gas, students are given directions to drive to successive designated spots. Arriving at each correct destination adds points to the user's score.
5. FIND THE KEYS - This hide-and-seek game asks students to move the car around the town to find 12 randomly hidden keys before the car runs out of fuel. Points are awarded for each key found and bonus points are awarded for the amount of fuel left.

Movement around the town enables children to learn simple directions (up, down, left and right), cardinal directions (north, south, east and west), and intermediate directions (northwest, northeast, southeast, southwest). The objects displayed are all randomly chosen. Intermediate visual and optional audio feedback messages are provided after each move. As soon as a student runs out of fuel in options 4 and 5, quantitative feedback provides a tally of the number of stops taken and the student's score. Sequence and rate are totally under student control. A guide book provides program descriptions, operating instructions and additional classroom follow up activities.

PROGRAM EVALUATION

This program uses the computer to teach the abstract concepts of mapping skills in a motivating way. Teachers will have to monitor students closely to ensure that students are actually learning something rather than making random placements of buildings in the town planning section and that they go beyond just the game playing phase of the other activities. Some teachers may question the value of the activities in "Build a Town," particularly for the younger students. The buildings are portrayed from an aerial perspective, giving students a concept of relative distances, but students may find them difficult to interpret. Also, the activity does not really promote planning; buildings can be placed anywhere provided there is room and roads are completed by the program.

The fact that all selections are made from a menu and that students are automatically routed back to the menu after the completion of an activity makes this program easy to use. Creativity is encouraged in building a town, yet the concept of reality is maintained. While the program can be run on a monochrome monitor, the visibility of objects is much clearer on a colour monitor. Sudden stops, starts or direction changes are difficult to accomplish using keyboard controls; the joystick proves far more effective. Unfortunately there is no option to delete a town from memory; a created town must be overwritten with a new town to delete it.

STATUS

"Sticky Bear Town Builder" has been authorized as a **RECOMMENDED** learning resource for Grade 2.

PURCHASE INFORMATION

Alberta schools may purchase this program from the Learning Resources Distributing Centre. Check the LRDC Buyer's Guide or contact them at 427-2767 for warranty information.

NEW VERSIONS,
FORMATS OR UPDATES OF
PREVIOUSLY AUTHORIZED SOFTWARE

APPLEWORKS

DESCRIPTION

Title: AppleWorks
Author: Robert Lissner
Publisher: Claris Corporation
Source: 2 Berkeley Street, Toronto, ON M5A 4J5
Subject: Language Arts,
Computer Processing

Version: 1987 Ver. 2.1
Display Language: English
Cost: LRDC Buyer's Guide
Tel. #: (416) 941-9611
Users: Grades 1–9
Grades 10–12

Topics: The writing process, word processor, data base management, spreadsheet
Components: 3 disks (AppleWorks Training, sample files, startup/program disk), reference manual, tutorial manual
System Requirements: Apple IIe/IIc/IIgs, 64K (128K preferred), 1 disk drive (2 preferred), monitor, 80–column card (for IIe only), printer
Other Formats Available (not evaluated): Available only in Apple format

WORD PROCESSOR DESCRIPTION

"AppleWorks" is menu driven and commands are mnemonic. The word processor allows text to be moved, copied or deleted by highlighting after accessing the appropriate command. Editing options allow the use of either the insert or overstrike cursor. The search-and-replace function operates in a forward direction, only for strings of a maximum 30 characters. Upper or lower case sensitive search as well as global search and replace are available. Data disks can be initialized directly from the program at any time, and the student may save a document at any time during the creation process. Defaults for margins, tabs, paper size, spacing (single, double, or triple), printing density and justification (right or centre) may be changed and saved within the document whenever required during document creation and/or editing. Other formatting options include: indentation functions that allow the creation of hanging paragraphs, bulleted lists and outlines; proportional fonts; and boldface, underline, superscript and subscript features. One-line headers and footers include text and an optional page number display. Pagination is automatic or user generated. The program can print single or multiple documents, multiple copies and all, or parts, of a document. "AppleWorks" will interface with ASCII files from other word processors and can use converted files from other operating systems. The program also provides a mail merge feature that will merge information from a data base with a word processing file.

SPREADSHEET AND DATABASE DESCRIPTION

The "AppleWorks" spreadsheet offers 127 columns and 999 rows and provides the mathematical functions of average, count, lookup, maximum, minimum, net present value, square root and sum in conjunction with conditionals of IF/THEN. Variable column widths are allowed with the smallest column being three characters wide. The spreadsheet makes provision for decimal rounding and use of leading dollar signs, but scientific notation is not accommodated. Moves of 125 columns or 250 rows at one time can be accommodated and are assisted by split screen viewing featuring either synchronized or independent scrolling.

"AppleWorks" data volume capacity is defined as 1350 records containing 30 fields with a maximum entry size of 76 characters. Field names are definable by the user and the program will support a variety of field types (numerical, alphanumerical, integer, floating point, etc.). The program will perform a sort on any field and it offers a variety of selection criteria (equal, >, <, range, not, or, etc.) including partial fields. It can search for more than one field at a time and will search for strings as well as words.

The flexibility of the print options depends largely upon the type of printer used. True screen formatting (with the exception of embedded commands) is available if the hardcopy is being printed in 10 characters per inch. Compressed print mode of 17 characters per inch is available. The program offers six lettering sizes and italics can be added. Horizontal lines are accommodated; vertical lines appear in broken mode.

WORD PROCESSOR EVALUATION

Although "AppleWorks" lacks the pull-down menus, "Mac"-like capabilities, and font and picture features of some of the more recent word processors, it is a very functional, easy-to-learn, well-documented program ideally suited to "first-time" students and has the ability to grow with them. Onscreen help and prompts are excellent and would provide effective guidance for beginning word processing students. Text can be inserted and deleted easily; however, it is unfortunate that the word processor does not have the ability to recover deleted text. The move and copy functions are efficient and fairly straight-forward, and the use of highlighting to select text makes these processes very clear. The ability to move and copy text between documents is a strength, but there is no provision for viewing both the source and the new location simultaneously within either the same or a different document. Although documents are quickly and easily saved to disk, a feature to automatically save text to disk at periodic intervals would have been valuable for the beginning student. The process of loading files is easy, though somewhat slow. While "AppleWorks" can be operated with 64K, 128K is strongly recommendedand reduces the number of times the

program accesses the drive, and the time required to carry out file management functions. The use of two disk drives also facilitates more efficient operation of the program. The document length restriction of eight pages on a 64K computer or 26 pages on a 128K is limiting; however, this can be overcome by the fact that several files can be linked together. Print formatting functions are quick and easy to change using the menu. Centring within the word processor is limited to between margins only; however, centring over a column is possible in the spreadsheet, and documents created there can be transferred to the word processor. A problem occurs when right justification is invoked with enumerations as it causes misalignment. While word wrap cannot be disabled, "sticky" spaces can be used to keep short items together.

SPREADSHEET AND DATABASE EVALUATION

The 126,873 cells available for data entry in "AppleWorks" spreadsheet are theoretically ample. In fact, capacity exceeds memory. Depending on the complexity of the formula, a 64K computer will allow approximately 1000 filled cells; a 128K computer will allow approximately 6000 filled cells. The nine mathematical calculation functions offered by "AppleWorks" are far fewer than those offered by stand-alone spreadsheets; however, the arithmetic operators are adequate to illustrate the use of spreadsheets for accounting and budgeting in an educational setting.

"AppleWorks" database manager offers sufficient power to provide a good introduction to data management, but it lacks sufficient text capacity to enable use for applications such as multiple choice test construction. The theoretical data volume capacity is again practically limited by memory constraints: approximately 140 records on an 64K computer and 750 records on a 128K machine. The creation of templates is relatively easy and the sorting speed is very satisfactory. The fact that searches and sorts can be viewed onscreen before printing is a program plus. While changes to a database are possible after initial template creation, adding or deleting fields destroys the layout and report formats though the records themselves remain intact.

INTEGRATION AND IMPLEMENTATION SUPPORT EVALUATION

This program offers good integration if used with 128K memory; Apple IIe owners are strongly urged to upgrade to 128K to gain full utility of the program. The ability to work with up to 12 files at once provides advantages to students using the word processor with different applications. Users can save up to 128 files, depending on memory. All files in the spreadsheet and data manager can be moved to the word processor for refined editing; however, moves from the spreadsheet to the data manager sometimes require that DIF or ASCII files be created. Insertions and deletions are easily accommodated. The inverse highlighting together with a confirmation question help to reduce potential errors. Unfortunately the program does not offer any form of password security and has limited file locking ability. The print options work as described, but some initial problems may be encountered when configuring the program to one's individual printer. The program is designed specifically to run with Apple's own serial printer, the "Imagewriter," so gaining interface with parallel printers will require some experimentation. The lack of spooling options and provision for priority printing are limiting factors. The "AppleWorks" documentation is comprehensive, well organized, sequentially developed, and easy-to-use with its clear explanations and illustrations. A training disk provides a nice step-by-step introduction to integration. The program is reliable and bombproof in normal classroom use.

STATUS

AppleWorks" has been authorized as a **BASIC** learning resource for Language Arts grades 1 to 9, and as a **BASIC** learning resource for Computer Processing 10/20/30.

PURCHASE INFORMATION

Alberta schools may purchase this program from the Learning Resources Distributing Centre for $43.85 (1989) less a 25% educational subsidy. Network versions are also available. Teachers, teaching assistants and administrators may purchase one copy/one time only for use in educational purposes. Contact the LRDC for details.

INTEGRATED ACCOUNTING

(for Macintosh version see "Simply Accounting")

DESCRIPTION

Title: Integrated Accounting (Education Version 3.23)
Authors: None Cited
Publisher: Bedford Software Ltd.
Source: 201, 4180 Lougheed Highway, Burnaby, BC V5C 6A7
Subject: Business Education
Topics: General ledger, accounts receivable, accounts payable, payroll, job costing, inventory
Components: 2 disks (5.25" and 3.5"), User's Guide (163p.), Instructional Workbook (54p.), summary of menus reference card, addendum (4p.)
System Requirements: IBM PC, PC-DOS 2.0 or later, 256K, 1 or 2 disk drives, monitor, printer
Other Formats Available (not evaluated): Macintosh

Version: 1987 Ver. 3.23
Display Language: English
Cost: LRDC Buyer's Guide
Tel. #: (604) 294-2394
Users: Grades 10-12

PROGRAM DESCRIPTION

(This analysis is based on the educational version.)

The user is provided with a predefined chart of accounts that may be modified, added to or deleted as required during the setup process. Double entry is automatically invoked, accounts are verified and any field can be corrected before permanent entry is made. Once equality status is achieved, journal entries are automatically posted to all accounts. A running total of the equality of debits and credits is shown on the screen for each transaction. The program generates a variety of reports including a trial balance, a balance sheet, an income statement, a payroll summary and a schedule of accounts receivable/payable. The program will generate a detailed sales report or a summary display of any customer's account, but will not print detailed customer profiles nor calculate service charges or print comparisons by account or salesperson. Income statements can only be printed for the company as a whole; however, a breakdown of expenses for each project can be obtained by printing the project module. (At the time of journal entry, expenses can be assigned to particular projects). The accounts payable module prints aging reports, and automatically keeps track of the earliest dated invoice and earmarks this when payment is activated. Aging periods can be set by the user. The program can be set to retain customer/vendor history after invoices have been fully paid. The receivables module will also print invoices. Tax updates effective July 1, 1988 are accommodated such that provincial tax calculations in Manitoba, Saskatchewan and Quebec can be entered. Specific tax deductions can be set to apply before or after taxes. The program performs automatic calculation of deductions entered plus income tax, UIC and CPP deductions, and can print T4 forms. Payroll can be displayed, printed and exported as "Detail" or as "Summary" information, where Detail shows all journal entries for an employee, allowing review of prior payroll information.

PROGRAM EVALUATION

This program is designed to allow for easy transfer from manual accounting to automatic accounting and it provides an excellent framework from which to develop both general ledgers and journals. Pull-down menus make it easy to move from module to module. Well-written documentation, with numerous illustrations and good models, provides a good background both to general accounting and automated accounting. The program offers good screen prompts, quick response time, and its modules can be used independently of one another. The publisher offers yearly updates, which is a helpful feature. Students must have a thorough knowledge of debit and credit to use the program efficiently, but should an error be made, an error trace can be made from the journal printout and the entry corrected. Reports follow standard Canadian accounting practice and are clear and precise. A continuous comparison of the equality of debits and credits is displayed on the lower part of the screen. The fact that data that do not balance will not be accepted by the program proves to be a good verification tool. Four other useful features offered by the program are a built-in check for the logical arrangement of accounts, an automatic calendar for supplying dates, a job cost analysis report and an inventory module.

Program weaknesses are minor in relation to the strengths. The lack of an automatic service charge calculation is a program drawback. The automatic cheque writing function, that will print cheques without prior posting to a journal, could create a situation in which cheques are created but not recorded. Dollar signs are not accepted nor are they automatically printed by the program. It might be annoying to remember that, in the educational version, all dates must be earlier than January 1, 1988. Unfortunately, the program does not retain data from past years, thus comparison printouts cannot be displayed. However, the program allows the export of financial statements to spreadsheets and word processing programs. Finally, the use of the left arrow key to accept information (rather than the return key) is unconventional.

COMPARISON OF "INTEGRATED ACCOUNTING " VERSION 3.23 WITH VERSION 3.20

The following enhancements are available on the newer version of "Integrated Accounting":

1. Dates up to January 1, 1988 are now accepted.
2. Tax updates effective July 1, 1988 are now accommodated in two new fields: ProvClaim for employees taxed by Manitoba, Saskatchewan or Quebec, and FedClaim for all other employees. The disk also contains the pre-July 1 tax formulas.
3. With the addition of three new fields called AfterTax, the program now allows the user to define whether specific deductions should be applied before or after taxes.
4. The Payroll module can now be displayed as Detail information as well as Summary information, which may be printed or exported. Detail information shows each and every journal entry for an employee, allowing review of prior payroll information and manual preparation of an ROE.
5. The user may now select the Date format (mm-dd-yy or dd-mm-yy).
6. The user may now set a cheque number for payable or payroll cheques.
7. The program now allows all journal entries recorded in a given Session (since the most current start of the program) to be printed, displayed or exported.
8. Laser printers are now supported, such that the program prints one cheque, invoice or statement per page when the Laser menu item is used.
9. An Instructional Workbook is available, containing step-by-step practice exercises in the use of the program's modules. This workbook is not intended to replace the User's Guide.

STATUS

"Integrated Accounting (Educational Version 3.23)" has been authorized as a BASIC learning resource for grades 10 to 12.

PURCHASE INFORMATION

Alberta schools may purchase this product from the Learning Resources Distributing Centre for $34.50 (1989). Contact the LRDC for warranty and update information. Program updates are available, whenever payroll deduction formulas change. Because of frequent disk interaction, this disk can be used on only one computer at a time.

MAGIC SLATE II

DESCRIPTION

Title: Magic Slate II
Authors: Donna Stanger et al.
Publisher: Sunburst Communications
Source: P.O. Box 3240, Station F, Scarborough, ON M1W 9Z9
Subject: Language Arts
Topics: Word processor

Version: 1988 1.0
Display Language: English
Cost: LRDC Buyer's Guide
Tel. #: 1-800-247-6756
Users: Grades 2-9

Components: 1 20-column disk with backup, 1 40-column disk with backup, 1 80-column disk with backup, three teacher's guides (104p., 97p., 48p.), reference manual (93p.), three quick reference cards

System Requirements: Apple II + /IIe/IIc/IIgs, 128K, 1 or 2 disk drives, monitor, graphics printer desired, 80-column card needed for Apple IIe with 80-column version

Other Formats Available (not evaluated): Available only in Apple format

PROGRAM DESCRIPTION

"Magic Slate II" is available in three different versions (20-, 40- and 80-column that can be purchased separately or together) to meet the varying needs of students. Basic word processing functions are chosen by icon and commands are mnemonic. The editor operates in typeover or insert mode, and a Non-Breakable Space function allows the user to define a space that will not be broken at the end of a line. Up to eight typestyles are offered, but some require a printer with graphics capabilities. Scrolling allows movement by line, sentence, page or to the beginning or end of a file. Any size block of text can be moved, copied or deleted by marking beginning and end points of the block and following prompts. The search-and-replace feature accommodates words or strings of up to 31 characters and allows either global searching or highlighting of the next/previous occurrence of text. Margins are preset or can be custom-formatted by the user, and a new Quick Format option is available. Up to eight tabs and three submargins may be altered by the user. Vertical spacing of single, 1 1/2, double or 2 1/2 lines can be selected. Text can be left-, centre-, right- or full-justified. Pagination is automatic or user generated, and headers/footers showing page numbers can be activated. The program allows a series of files to be loaded for printing. The teacher's guides contain complete instructions for the program, system configuration information, tutorials and lesson ideas, writing exercises and masters, trouble-shooting information and shortcuts/tips for advanced users. A quick reference card for each program version and a 93-page reference manual with glossary and index provides quick information on all commands and functions.

PROGRAM EVALUATION

"Magic Slate II" is a new version. Key improvements include the new "teacher planner" and "fill-in" functions, that allow the teacher to place unalterable portions of text into a file to which students will add material. A helpful "student planner" allows the user to create outlines or write notes inside onscreen planning boxes. Several permanent defaults can now be set, making the program much easier for inexperienced student users: text entry mode, measurement system (standard or metric), paper format, data disk location, etc. The ability to now change typestyles or add underlining without retyping text is a major strength. The program also now supports "Magic Slate II School Speller" (not evaluated), though this program is not included in the purchase price. A minor annoyance worth noting is the fact that files formatted for the old "Magic Slate" program must be converted for "Magic Slate II" using the Utilities menu. The program still offers well-organized, clearly written documentation with helpful lesson plans. Extensive menus and prompts walk the user through procedures such as cutting and pasting, saving or deleting text. This makes the program user friendly, but necessitates several steps to complete any operation. Moving text is particularly cumbersome with the process of marking and numbering blocks. A prompt verifies the user's wish to delete a file, but a single block can easily be deleted without warning. However, the "get" command enables the user to retrieve up to two pages of text. The ability to define function keys is a useful feature and margins are now easier to set using the submargin feature.

COMPARISON OF "MAGIC SLATE II" WITH "MAGIC SLATE" (VERSION 1.3)

"Magic Slate II" is very similar to "Magic Slate," but users should be aware that "Magic Slate II" has an extended memory requirement of 128K. "Magic Slate" files can be converted for "Magic Slate II" using the Utilities menu, though this process is somewhat cumbersome. The publisher continues to support "Magic Slate" versions 1.3 and 1.4. "Magic Slate II" contains the following changes and enhancements for educational use:

1. The window option for the 80-column version allowing the user to split the editing screen has been eliminated.
2. The 20-, 40-, and 80-column versions are packaged in separate binders and can be purchased separately or together. Documentation is slightly improved with enhanced graphics and typestyles, and a slightly easier-to-use quick reference manual.

"MAGIC SLATE" (continued)

3. A new "fill-in" mode allows the teacher to create permanent fill-in-the-blank files for students to complete.
4. A new "teacher planner" allows the teacher to place blocks of unalterable text in a file to which students will add material.
5. A new "student planner" allows the user to create an outline or write notes inside onscreen planning boxes.
6. Up to three submargins can now be added to easily indent text.
7. A spelling checker, "Magic Slate II School Speller" (not evaluated), can now be accommodated by the program but is not included in the purchase of Magic Slate II.
8. Typestyles can now be changed and underlining added without retyping text, and a new "stencil" typestyle has been added.
9. Several permanent defaults can now be set, making the program much easier for inexperienced student users: text entry mode, measurement system, paper format, data disk location and virtual memory file location (80-column version only).
10. A new "quick format" printing option is available for the 40- and 80-column versions, and a user can now print a series of files in succession.
11. A new "quick save" function allows the user to save files without returning to the main menu.

STATUS

"Magic Slate II" has been authorized as a **RECOMMENDED** learning resource for grades 2 to 6 and a **SUPPLEMENTARY** learning resource for grades 7 to 9.

PURCHASE INFORMATION

Alberta schools may purchase this program through the Learning Resources Distributing Centre. Contact the LRDC for pricing and warranty information. This program has the advantage of being capable of operation on more than one computer at a time however, such use is subject to copyright laws and any licence or purchase agreement.

MATH-THÉMATIQUE 3
MATH-THÉMATIQUE 4
MATH-THÉMATIQUE 5
MATH-THÉMATIQUE 6

DESCRIPTION

Titre: Math-Thématique 3, 4, 5, 6
Auteurs: Doug Super et al.
Editeur: Editions FM
Source: 1113, avenue Desnoyers, Laval QC H7C 1Y6
Matiere: Mathématiques

Version: 1988
Langue d'affichage: Français
Cout: LRDC
Tel.: (514) 324-0712
Utilisateurs: 3e, 4e, 5e, 6e

Sujets:
MATH 3: nombres entiers et decimales; estimations; resolution de problemes; l'heure; la congruence
MATH 4: nombres entiers, decimales et fractions; estimations; resolution de problemes; aires; la congruence; faire du change
MATH 5: nombres entiers, decimales et fractions; estimations; resolution de problemes; arrondissements; aires et perimetres; l'heure
MATH 6: nombres entiers, decimales et fractions; estimations; résolution de problemes; système metrique; l'heure

Composantes: 4 disquettes et 4 disquettes de rechange, guide du maitre, fiches de travail et activités suggérées

Materiel requis: IBM PC, PC DOS 3.2 ou inferieur, 128K, 1 unité de disque, moniteur couleur (preférable), carte graphique CGA necessaire

Disponibilite sur d'autres ordinateurs: Une version Apple par Houghton-Mifflin est disponible du LRDC.

DESCRIPTION DU PROGRAMME

Ces ensembles sont conçus pour engager les élèves dans des experiences pratiques comprenant l'estimation, les strategies et résolution de problèmes, le developpement des concepts et renforcer les habiletees de base en mathematiques. Chaque ensemble dans cette serie, Math-Thématique, comprend 15 programmes presentes sous forme de jeux. Chacune des activites vise directement à appuyer le concept central d'une des unités du livre correspondant de "Houghton Mifflin Mathématique." L'organisation des jeux permet à l'eleve ou au groupe d'eleves de jouer contre l'ordinateur ou entre eux. Plusieurs des activites sont ouvertes.

L'interaction avec l'ordinateur consiste à faire des entrees relatives a des reponses que l'ordinateur exige, à la selection de menus et au choix du nombre de joueurs. Les questions sont posées au hasard. Les techniques de rétroaction varient d'un programme à l'autre mais sont presque toutes presentees sous forme graphique avec l'aide des sons appropries.

Le programme est accompagne d'un systeme de gestion qui permet de controler la sélection des programmes à utiliser par les eleves. Le guide du maitre contient des fiches de travail, des instructions pour l'utilisation des programmes, des suggestions d'activités pour la classe et decrit les objectifs de chaque programme.

ÉVALUATION DU PROGRAMME

Le contenu, l'ordre de presentation et le niveau de difficulte sont adaptes au programme d'etudes de l'Alberta. Chaque ensemble contient des programmes qui sont trop difficiles pour la plupart des eleves du niveau correspondant, mais qui seraient plus appropries pour de l'enrichissement. Les programmes renforcent les strategies de resolution de problemes, les estimations et le developpement d'habiletés de base de façon à interesser et motiver l'eleve.

L'interaction est logique et les techniques d'enseignement utilisees dans ces programmes sont appropriees aux classes types de 3e, 4e, 5e, 6e année. La structure des jeux est à la fois unique et pleine d'imagination et renforce les principes qui sont enseignes dans la classe. La retroaction instantanee et l'absence de pression pour l'apprenant sont tres appropriees. Les graphiques, le texte et le son sont tous utilises avantageusement. Comme il n'y a aucune explication du jeu sur la disquette, les debutants peuvent se sentir frustrés. Les enseignants devront aider les eleves ayant des difficultés puisque la rétroaction est limitée et certaines des activités pour résoudre les problèmes peuvent s'avérer trop difficiles pour les élèves plus faibles.

La création technique des programmes est excellente. Les affichages à l'écran sont tres appropries et efficaces. L'utilisation de textes (caracteres) de grand format pour des nombres ou des concepts importants, est très efficace. Le système de gestion est d'acces et d'utilisation facile. La documentation est bien organisee et il est facile de suivre les directives. Les fiches de travail sont étroitement reliées aux programmes de l'ordinateur.

"MATH-THÉMATIQUE" (continued)

COMPARAISON ENTRE LES FORMATS APPLE – IBM

Une comparaison des programmes "Math-Thématiques 3, 4, 5 et 6" pour les ordinateurs Apple et IBM a identifié très peu de différences. Les seules différences notées sont indiquées ci-dessous.

1. Les programmes sont disponibles de différentes maisons d'éditions;
2. Le format IBM utilise quatre disquettes au lieu de trois;
3. Le format IBM permet plus de temps à l'élève pour accomplir l'activité 6, 3e année;
4. Les commandes dans le guide du maître de 5e année reflètes la programmation nécessaire pour l'ordinateur IBM.

Ces différences n'ont aucunes implications sur l'évaluation finale des programmes.

STATUT

Les ensembles: "MATH-THEMATIQUE 3," "MATH-THEMATIQUE 4," "MATH-THEMATIQUE 5" et "MATH-THEMATIQUE 6" sont autorisés comme ressources pédagogiques de statut **"RECOMMANDÉ."**

ACHAT

Les écoles de l'Alberta peuvent acheter ces ensembles du Learning Resources Distributing Centre pour 267,90$ (1988) chacun. Il est à noter que ces ensembles contiennent des disquettes de rechange. Ces disquettes ont l'avantage de pouvoir être utilisées sur plus d'une machine à la fois, s'il n'y a qu'une seule activité qui est mise en action en même temps; par contre, cet usage est soumis aux lois qui régissent les droits d'auteur et toute licence ou entente acceptée lors de l'achat du matériel.

MICROSOFT WORD

(IBM Version 4.0)

DESCRIPTION

Title: Microsoft Word
Author: None Cited
Publisher: Microsoft Corporation
Source: 14th Floor, 10655 Southpark Road S.W., Calgary, AB T2N 4Y1
Subject: Business Education
Topic: Word Processor

Version: 4.0
Display Language: English
Cost: LRDC Buyer's Guide
Tel. #: (403) 271-6944
Users: Grades 10-12

Components: 9 disks (program, utilities/setup, thesaurus, spell, 2 printer, 3 learning); user's guide (498p.); reference guide (219p.); printer guide (100p.); pocket guide (43p.); new features brochure (4p.); fast results brochure (21p.); 5 keyboard templates

System Requirements: IBM PC/XT/AT/PS/2, PC-DOS 2.0 or later, 256K (320K required if Help Tutorial used), dual floppy drives or floppy drive and hard disk system, monitor, printer, mouse (optional), Hercules graphics card (if monochrome monitor used), colour/graphics adapter or Enhanced Graphics Adapter (if colour monitor is used)

Other Formats Available : IBM PC and compatibles

PROGRAM DESCRIPTION

This sophisticated word processing package uses approximately 260 commands and resides on nine disks. Document size is limited only by the available memory and file names are limited to a maximum of eight characters. The bottom four lines of the screen are reserved for the command menu, for error messages and for status information. An online tutorial as well as an onscreen help function are available at any time. Cursor movement is accomplished with the arrow keys, page up, page down, home and end keys either singly or in combination with CTRL or function keys (for more complex movements such as within a window). Deleting may be done by character, word, line, paragraph, page or specified sections of a document. An UNDO command will reverse the last editing or formatting action. Blocks of material of any length may be moved, and vertical and horizontal windows enable viewing of both the source and the destination. Formats and styles may be searched and replaced. The print merge command automatically prints customized versions of form letters through the creation of main and data documents. Files can be imported and exported from other major software packages using various file formats. The program supports left, right, centre or the decimal point tab stops, multicolumn documents with separate formatting settings for each column, centring, hyphenation, justification, line spacing by line or points, automatic pagination, various page number formats (Arabic, Roman upper or lower case, alphabetic upper and lower case), optional mouse cursor control, automatic numbering of footnotes, term designation for a table of contents or index, glossary entries and glossary files, calculations, customized form letters, widow/orphan control, reverse field viewing, a thesaurus (220,000 words), a spell feature (130,000 words in the standard dictionary plus a user-defined dictionary), macro sequences and autoexec macros.

PROGRAM EVALUATION

Document creation is simple and adjustments to the default values are straightforward. While the program will perform all desired editing procedures, gaining initial familiarity with the 260 possible commands is time consuming. Moves are easily accomplished, both within a file and between files. The ability to recover material erased under the delete command is a useful feature. This program offers good interface capability, and the deletion of files is facilitated by wild-card character capability. The margins are easily set and adjusted, but are tucked away within the format command under paragraph or division, rather than as a separate format. The process of setting and adjusting tabs is easy and offers good flexibility. Printing options provide for the printing of entire files, portions of documents, printing of vertical and horizontal lines, and for spooling. The screen display is excellent. While the program offers a good range of features, disk swapping is required to operate them. The student tutorial is very useful and comprehensive.

The documentation is well organized; however, it is written for someone with previous exposure to word processing. Some of the terminology is unconventional (e.g., select - cursor movement, running head, headers and footers, etc.) and some explanations are too brief to enable easy implementation for a novice.

It is possible to lock the program by pressing a key prematurely while the program is processing.

COMPARISON OF VERSION 3.1 AND VERSION 4.0

Microsoft Word Version 4.0 offers improved speed and new ways to choose commands and use the keyboard (each function key now has four associated actions). Version 4.0 contains the following significant changes:

1. Macros can be programmed to record sequences of keystrokes, commands and edits.
2. Spreadsheet data from Excel, Multiplan and Lotus 1-2-3 can be imported.
3. Lines, boxes and borders can be used to highlight printed text.
4. Revision marks can be added to text within a document.
5. Line numbers can be displayed and printed.
6. Formats and styles can be searched and replaced.
7. The user can operate in either graphics or text mode.
8. Styles can be created by example.
9. A table of contents can be generated from an outline.
10. The use of a mouse has been expanded.
11. The documentation has been reorganized and expanded to reflect the changes.
12. Mathematical functions recognize parentheses and operator precedence.
13. Form documents can be previewed and edited before printing.
14. Text from other documents and applications can be copied, inserted, and deleted.

The revisions to both the documentation and tutorial have resulted in improved clarity and are a positive feature.

NOTE

The thesaurus is comprehensive and contains terms that may be objectionable to some individuals and community members.

STATUS

"Microsoft Word" has been authorized as a **BASIC** learning resource for grades 10 to 12.

PURCHASE INFORMATION

Alberta Schools may purchase this product from the Learning Resources Distributing Centre. Contact the LRDC for current price and warranty information.

MICROSOFT WORD
(Macintosh Version)

DESCRIPTION

Title: Microsoft Word
Authors: None Cited
Publisher: Microsoft Corporation
Source: 14th Floor, 10655 Southpark Road SW, Calgary, AB, T2N 4Y1
Subject: Business Education
Topics: Word Processor

Version: 3.01
Display Language: English
Cost: LRDC Buyer's Guide
Tel. #: (403) 271-6944
Users: Grades 10-12

Components: 1 double-sided program disk, 1 double-sided utilities disk, Learning Microsoft Word users' guide (151p.), Quick Reference guide (17p.), Reference to Microsoft Word (458p.), Microsoft Word 3.01 Additional Information (29p.)

System Requirements: Macintosh, 512K, 1 double-sided or 2 single-sided or 1 hard disk drive, printer

Other Formats Available (not evaluated): IBM PC and compatibles

PROGRAM DESCRIPTION

This sophisticated word processing package uses special key sequences and/or the mouse to activate the hundreds of commands and options available to the user. Document size is limited only by the available memory and file names are limited to a maximum of 31 characters. The top and bottom of the screen are reserved for status and command information while additional workspace is used, as needed, for pull-down menus and windows. An online help function is activated by using the mouse to point at a command or menu. Cursor movement is accomplished with the arrow, page up, page down, home and end keys; numeric keypad (in conjunction with the command key, option key or both); and mouse. Deleting may be done by character, word, line, paragraph, page or specified sections of a document. An UNDO command will reverse the last typing, editing or formatting action. Blocks of material of any length may be moved, copied and pasted within a document or to other documents. The view of a document can be split into two windows and other documents can also be viewed on the screen simultaneously. Formats and styles are defined by example and may be searched and replaced. The print merge command automatically prints customized versions of form letters through the creation of main and data documents. Files can be imported and exported from other major software packages using various file formats. The program supports left, right, centre and decimal point tab stops, multicolumn documents with separate formatting settings for each column, centring, hyphenation, justification, line spacing by line or points, automatic pagination, various page number formats (Arabic, Roman upper or lower case, alphabetic upper and lower case), mouse cursor control, automatic numbering of footnotes, term designation for a table of contents or index, glossary entries and glossary files, calculations, customized form letters, widow/orphan control, hidden text and a spell feature (includes both an American and a British dictionary as well as a user-defined dictionary). The user can print files, portions of documents, multicolumns and side-by-side paragraphs.

PROGRAM EVALUATION

Document creation is simple and adjustments to the default values are straightforward. The program's design has been segmented so that the novice can quickly learn and use the basic features of the program. The skills and knowledge required to use more complex commands and functions can be learned as needed. Moves are easily accomplished, both within a file and between files. The ability to recover material erased under the delete command is a useful feature. Cursor control is extensive and enhances the manipulation of text within a document. This program offers good interface capability. The process of setting and adjusting tabs, margins, paragraph format and section format is easy and offers good flexibility. The glossary and style capabilities are valuable to the non-novice though some study and practice is required to become fully comfortable with their nuances. The "what-you-see-is-what-you-get" screen display is excellent.

The reference documentation is functionally organized and is supported by an excellent index.

COMPARISON OF IBM - MACINTOSH VERSIONS

This report was based on an initial evaluation of the IBM version. The Macintosh version of this program parallels the IBM version on a functional basis but the use of the mouse makes the process of manipulating commands quite different. It should be noted that all mouse commands can be accessed via the keyboard by using various command and option key sequences. The main strength of the Macintosh version is the true implementation of the "what-you-see-is-what-you-get" concept.

Several differences found between the two versions are listed below:

1. The Macintosh version does not include an interactive student tutorial program but this is compensated for by an excellent "help" command.
2. All searches in the Macintosh version start at the insertion point and proceed to the end of the document with an option to continue the search from the beginning when the end of the document is reached, while the IBM version can search forward or backward from the cursor.

"MICROSOFT WORD" (continued)

3. Both versions can sort alphabetically, but only the IBM version can sort according to ASCII code.
4. File names on the IBM are limited to eight characters and on the Macintosh the maximum length is 31 characters.
5. It is easier to manipulate imported graphics with the Macintosh version.
6. For the advanced user involved in desktop publishing, the Macintosh version supports the "Postscript" language for the Apple LaserWriter.
7. The programming of glossary and style entities can be accomplished by example on the Macintosh version thereby freeing the user from memorizing many commands.
8. The Macintosh version does not support a thesaurus.
9. The manuals for the Macintosh program are organized differently to reflect the Macintosh's operating system. Essentially the same functions are covered in both the IBM's and the Macintosh's manuals.

The Macintosh version of "Microsoft Word" uses the standard Macintosh pull-down menus and functions; therefore, any user who is familiar with the operation of a Macintosh computer would be able to use this program as a basic word processor with very little, if any instruction.

STATUS

"Microsoft Word" has been authorized as a **BASIC** learning resource for grades 10 to 12.

PURCHASE INFORMATION

Alberta schools may purchase this product from the Learning Resources Distributing Centre. Contact the LRDC for current price and warranty information.

REFLEX: THE ANALYST

DESCRIPTION

Title: Reflex: The Analyst
Authors: None Cited
Publisher: Borland International
Source: 4585 Scotts Valley Drive, Scotts Valley, CA 95066
Subject: Business Education
Topics: Data Base management

Version: 1.14
Display Language: English
Cost: LRDC Buyer's Guide
Tel. #: (408) 438-8400
Users: Grades 10-12

Components: 3 disks, user's guide (488p.), keyboard template
System Requirements: IBM PC/XT/AT/3270/IBM PS/2, PC-DOS 2.0 or later, 384K RAM, dual floppy drives or a floppy drive and hard disk system, printer, mouse (optional)
Other Formats Available (not evaluated): Macintosh, IBM compatibles

PROGRAM DESCRIPTION

"Reflex" offers integrated data base, graphics and statistics programs and a separate report writer module. It allows up to 65,534 records per file with a maximum of 250 fields per record. The maximum number of characters per record is 32,512 and the maximum number of characters per field is 254. Fields may be user defined as text, numerical (integer, currency, financial), calculated value or date. Field names may be up to 72 characters long. Searches may be done for full fields or parts of a field for exact or partial matches. Changes to fields may be done at any time using the form editing function. The report generator offers several options to customize reports. Margins of 1-255 characters in length are supported with the number of lines per page ranging from 1-200. The built-in functions of the report generation module include: count, minimum, maximum, sum, average, percentage of total, variance and standard deviation, along with date functions. In addition the cumulative function permits conditional summations based on field values and conditions. Test conditions can be applied to records or displays via a user-designed filter; subsequent reports will be based only on those records that fit the filter criteria. Programmable functions such as if/then and case statements are available. Both horizontal and vertical subtotals and totals are provided and calculations may be carried from record to record. A graphics function produces scatter, line, bar, cumulative bar and pie graphs based on information from records in the data base. An interactive analysis mode depicts in chart form the underlying detail of selection points on the graph. Record deletion can be performed by single record, single criteria or total records (leaving the record form intact). Files can be interfaced with Lotus 1-2-3, Symphony, dBase II and III, PFS or DIF files. Standard ASCII text files formatted according to certain restraints can also be imported and translated into "Reflex."

PROGRAM EVALUATION

The well-organized tutorial, excellent onscreen help and pull-down menus make "Reflex" easy to learn and operate. The option of form or list viewing for both data entry and editing is a program strength: the list mode is particularly helpful in allowing the user to see what previous records contained. Two windows are available to permit simultaneous viewing of two files or portions of a file. In the event of faulty data entry on screen, prompts are given and the cursor is moved to the error location. Statistics may be altered by the user, providing good flexibility. The blank screen allowing flexibility in the location of fields and field names makes initial setup easy. Searches are also extremely easy with the fill-in-the-blank search screen. Since the entire program and its data base are resident in RAM, sorts are rapid though the size of the data base is limited by the size of memory. The crosstab function provides a powerful method of making calculations and comparisons using any one of 56 built-in functions. The report generator is easy to use and extremely flexible in the ability to design and print reports as a series of small modules, to print only portions of the report and to position fields within the constraints of the report format. The reference manual is edge-coded, facilitating quick "lookups." Tutorials are well designed presenting objectives for each section, a theory section, a practical application and a summary of the main points. The breakdown of the manual into sections enables students to use only the parts of the data base required for a single application while ignoring other commands, hence shortening initial learning time.

This program is a file manager and not a true relational data base. Its chief drawbacks are the inability to merge and join files with different field arrangements without creating a new file, and the lack of program checks to prevent the accidental deletion of files. Checks for duplicate records must be done manually. Unfortunately the report generator must be run from DOS on its own, which is inconvenient.

COMPARISON OF "REFLEX:THE ANALYST" (VERSION 1.14) WITH "REFLEX: THE DATABASE MANAGER" (VERSION 1.12)

The new version is very similar to Version 1.12, with the following changes and minor enhancements:

1. The program name has been changed back to "Reflex: the Analyst," but the program itself remains essentially the same.
2. "Reflex: the Analyst" now supports the new enhanced graphics modes available on the new IBM Personal System computers, including the AT&T 6300, the IBM BGA, the Sigma 400 and the IBM 3270.
3. The program now supports a wider variety of printers, including the HP Laser Jet and Laser Jet Series 2, HP 7558 Plotter, Texas Instrument 855 and Toshiba 351.

STATUS

"Reflex: The Analyst" has been authorized as a **BASIC** learning resource for grades 10 to 12.

PURCHASE INFORMATION

Alberta schools may purchase this product from the Learning Resources Distributing Centre. For the latest price and warranty information, contact the LRDC.

Defective disks and documentation will be replaced free of charge by Borland International provided they are notified of defects within a 60–day (from date of purchase) warranty period.

SIMPLY ACCOUNTING

(Macintosh Version of "Integrated Accounting")

DESCRIPTION

Title: Simply Accounting
Authors: Grant Wong and Jeff Ferguson
Publisher: Bedford Software Ltd.
Source: 201, 4180 Lougheed Highway, Burnaby, BC V5C 6A7
Subject: Business Education
Version: 1988 Ver. 1.03
Display Language: English
Cost: LRDC Buyer's Guide
Tel. #: (604) 294-2394
Users: Grades 10-12
Topics: General ledger, accounts receivable, accounts payable, payroll, job costing project, inventory
Components: 1 disk, user's guide (175p.), accounting manual (105p.),
System Requirements: Macintosh Plus/SE/II, System 4.1 and finder 5.5, 2 800K disk drives or 1 800K disk drive and a hard disk, printer
Other Formats Available: IBM PC

PROGRAM DESCRIPTION

(This analysis is based upon the educational version.)

The user is provided with a predefined chart of accounts that may be modified, added to or deleted as required during the setup process. Double entry is automatically invoked, accounts are verified and any field can be corrected before permanent entry is made. Once equality status is achieved, journal entries are automatically posted to all accounts. A running total of the equality of debits and credits is shown on the screen for each transaction. The program generates a variety of reports including a trial balance, a balance sheet, an income statement, a payroll summary and a schedule of accounts receivable/payable. The program will generate a detailed sales report or a summary display of any customer's account, but will not print detailed customer profiles nor calculate service charges or print comparisons by account or salesperson. Income statements can be printed only for the company as a whole; however, a breakdown of expenses for each project can be obtained by printing the project module. (At the time of journal entry, expenses can be assigned to particular projects). The accounts payable module prints aging reports, and automatically keeps track of the earliest dated invoice and earmarks this when payment is activated. Aging periods can be set by the user. The printing of cheques does not cause any changes in the journal entries, therefore multiple copies of the same cheque can be printed. This is a positive feature if, for example, the printer is not properly aligned. On the other hand, if a second run of cheques is printed, the first run must be destroyed manually. The program can be set to retain customer/vendor history after invoices have been fully paid. The receivables module will also print invoices. Tax updates effective July 1, 1988 are accommodated so that provincial tax calculations in Manitoba, Saskatchewan and Quebec can be entered. Specific tax deductions can be set to apply before or after taxes. The program performs automatic calculation of deductions entered plus income tax, UIC and CPP deductions, and can print T4 forms. Payroll can be displayed, printed and exported as "Detail" or as "Summary" information, where Detail shows all journal entries for an employee, allowing review of prior payroll information.

PROGRAM EVALUATION

This program is designed to allow for easy transfer from manual accounting to automatic accounting and it provides an excellent framework from which to develop both general ledgers and journals. Pull-down menus make it easy to move from module to module, and the well-written documentation provides a good background both to general accounting and automated accounting. The program offers good screen prompts, quick response time, and its modules can be used independently of one another. The publisher offers yearly updates, which is helpful. Students must have a thorough knowledge of debit and credit to use the program efficiently, but should an error be made, an error trace can be made from the journal printout and the entry corrected. Reports follow standard Canadian accounting practice and are clear and precise. A continuous comparison of the equality of debits and credits is displayed on the lower part of the screen. The fact that data that do not balance will not be accepted by the program proves to be a good verification tool. Four other useful features offered by the program are a built-in check for the logical arrangement of accounts, an automatic calendar for supplying dates, a job cost analysis report and an inventory module.

The weaknesses of the program are minor in relation to its strengths. The lack of an automatic service charge calculation is a program drawback. Dollar signs are not accepted nor are they automatically printed by the program. It might be annoying to remember that, in the educational version, all dates must be earlier than January 1, 1988. Unfortunately, the program does not retain data from past years, thus comparison printouts cannot be displayed. However, the program allows the export of financial statements to spreadsheets and word processing programs.

"SIMPLY ACCOUNTING" (continued)

COMPARISON OF "INTEGRATED ACCOUNTING" (VER. 3.23) WITH "SIMPLY ACCOUNTING" (MACINTOSH VERSION)

1. The Macintosh version does not include an Instructional Workbook.
2. The manual for the Macintosh program is organized to reflect the Macintosh's operating system. The "Accounting Manual" is identical to that available for the IBM version.
3. A password function is not available in the Macintosh version.
4. The Macintosh version labels the "jobcost" function with "project."
5. The IBM version contains an extra field in the payroll information section.
6. The computer system is "transparent" to the Macintosh user and therefore the system menu found on the IBM version is not displayed in the Macintosh version of the program.

STATUS

"Simply Accounting (Education Version 1.03)" has been authorized as a **BASIC** learning resource for grades 10 to 12.

PURCHASE INFORMATION

Alberta schools may purchase this product from the Learning Resources Distributing Centre at the discount provided for basic educational resources. Contact the LRDC for pricing and warranty information.

WORDPERFECT

DESCRIPTION

Title: WordPerfect
Author: None Cited
Publisher: WordPerfect Corporation
Source: c/o J.B. Marketing, 120 9th St East, Box 422, Cornwall, ON K6H 5T2
Subject: Business Education
Topic: Word Processor

Version: 5.0
Display Language: English
Cost: LRDC Buyer's Guide
Tel. #: (800) 267-2424
Users: Grades 10-12

Components: 12 disks (2 program, speller, thesaurus, learning, ptr program, conversion, fonts/graphics, 4 printer), user's guide (482p.), WordPerfect Workbook (398p.), reference card, function keyboard templates

System Requirements: IBM PC/XT/AT, PC-DOS 2.2 or later, 384K RAM, dual floppy drives or a floppy drive and hard disk system, monitor, printer

Other Formats Available (not evaluated): Macintosh, Atari, Amiga

PROGRAM DESCRIPTION

This comprehensive word processing package is designed to provide the user with extended features such as a speller, a thesaurus, built-in mathematics functions and elaborate merging features. File sizes are limited only by the capacity of the disk. The user can change tabs, margins, justification, spacing (including proportional spacing and newspaper columns), fonts, hyphenation options and character alignment at any point during document creation. Key words or logical operators can be searched. Online help is available via the F3 function key. Text may be scrolled or moved in a variety of ways. The screen can be split horizontally allowing the user to operate and switch between two files. DOS commands are accessible from within the "WordPerfect" program. A timed backup feature will automatically save the current document at designated time intervals. Documents may be "locked" via assignment of a password. Many merge and interface applications are available and outlined in the documentation. Automatic pagination can be invoked using either Roman- or Arabic-style numbers. The screen display closely resembles the printed output. Other features offered by "WordPerfect" include the ability to create a table of contents of up to five levels, macro ability, selected math calculation options, a 100,000-word dictionary (can be customized) and thesaurus. The graphics feature allows the incorporation of imported graphics and the creation of boxes and lines within a document. Documents can be queued to print in sequence, however priority print can be used to interrupt this sequence. The classroom workbook is a supplement to the "WordPerfect" package. It takes the user through the word processing tasks in a step-by-step manner with emphasis on the fundamentals of word processing.

PROGRAM EVALUATION

Document creation is extremely simple and straightforward and default functions can be easily changed. Online help makes the editing process very easy. "WordPerfect" operates through extensive use of the function keys. Gaining initial familiarity with the function keys can be time consuming. Moving the text both within a document and between documents is easy and efficient. The process of copying files is uncomplicated and the vast array of merge options is explained in detail. "WordPerfect" will interface with a wide variety of programs. The assignment of password security to each file enables several students to use the same disk; however, there appears to be no facility for retrieving passwords if they are forgotten. The process of setting/changing tabs, indentations, line spacing, justification, etc. is efficient and straightforward. The program's adjustable hyphenation zone is excellent. The screen display is clear and uncluttered and closely resembles printed output. Unfortunately, on-screen justification is not available. The documentation is well organized, comprehensive and sequential. Illustrations are meaningful and attractively formatted. It is unfortunate that the reference guide does not include a table of contents. While an index is provided, it is not as comprehensive as one might expect. The WordPerfect workbook effectively covers basic fundamentals as well as advanced applications. The classroom workbook is well organized and helps students become familiar with the word processing capabilities of this package. Since the workbook is reusable, students may go over any parts that are causing difficulties as often as required.

COMPARISON OF VERSION 4.2 AND VERSION 5.0

The publishers have indicated the following key changes between version 4.2 and version 5.0:

1. Template (key) changes include the movement or renaming of seven keys and changes to virtually all submenus designed to produce a new layout combined with number or letter (mnemonic) commands.
2. Page, print and line format keys under 4.2 have been combined on a single key.
3. The 4.2 Pitch/Font selection has been expanded to include font size, appearance, base fonts and colour.
4. Version 5.0 now has a style command for recording and selecting a combination of formatting.
5. The new graphic ability and command structure brings up a menu offering four different box types plus lines (graphics display not necessary).

6. All "/S" setup options are now under a Setup menu. This includes an expanded keyboard layout and a new fast save feature.

In addition, "WordPerfect 5.0" provides the following advantages over 4.2:

1. Margin settings now use absolute measurements to facilitate use when mixing type sizes and switching paper sizes.
2. With a Ram-Fonts card, 5.0 has the ability to display all the different fonts shown.
3. Entry and display of measures are made more flexible and "WordPerfect" handles the conversions.
4. The formatting and printing functions are integrated.
5. Automatic font changes can be set while working in a document and can also be combined.
6. All initial codes are now stored in the prefix when a document is created and do not change if the document is retrieved under new setup initial codes.
7. "WordPerfect 5.0" expands the character set of the IBM PC to 1702 using 13 character sets (a graphics board that supports the 512 characters set is required to take advantage of this ability).
8. The format of the 5.0 spelling dictionaries has changed and a conversion program is available.

It should be noted that "WordPerfect 5.0" now requires 384 K of free RAM which means that it will not be possible to run version 5.0 on nondedicated servers running the IBM-PC-LAN or Token Ring networks. A hard drive or network with considerable free storage is recommended. The added power of "WordPerfect 5.0" will not be effectively accessed on a system with two 360K floppies. Installation and configuration procedures are different. Users are warned to use a new subdirectory/floppy disks to configure and install the program. Some file conversions will be necessary to switch from 4.2 to 5.0 documents. The extensive changes will require users to invest some time learning the new keys, menus and feature. Please note, this is an initial release of Version 5.0 and the publisher does not guarantee that the program is error free. Only a partial macro conversion utility is provided to convert from 4.2 to 5.0. Expanded macro documentation for 5.0's macro language is being developed. Custom 4.2 printer definitions are not totally compatible with 5.0 printer drivers. However, if the user's printer is supported in 5.0, new drivers are provided. **The publisher recommends that 4.2 users not upgrade to 5.0 until their systems can be upgraded to a hard drive.**

STATUS

"WordPerfect" has been authorized as a **BASIC** learning resource for grades 10 to 12.

PURCHASE INFORMATION

Alberta schools may purchase this product from the Learning Resources Distributing Centre for the following prices:

- $201.25 for the Administrative Stand-Alone Package.
- $565.00 for the Administrative Network Package (file server and two work stations) and $103.50 for each additional work station.
- $700.00 for a class package for 10 work stations (stand-alone or network).
- $940.50 for a class package for 20 work stations (stand-alone or network).
- $1193.50 for a class package for 30 work stations (stand-alone or network).

The program is available on either 3½" or 5¼" disks and is under warranty for 30 days. "WordPerfect Version 4.2" is also available from the Learning Resources Distributing Centre.

WORDPERFECT
(APPLE IIe Version)

DESCRIPTION

Title: WordPerfect
Authors: None Cited
Publisher: WordPerfect Corporation
Source: c/o J.B. Marketing, 120 9th St. East, Box 422, Cornwall, ON K6H 5T2
Subject: Business Education
Topics: Word Processor

Version: 1.1
Display Language: English
Cost: LRDC Buyer's Guide
Tel. #: (800) 267-9393
Users: Grades 10-12

Components: 3 double-sided program disks (program/utilities, work/learn, speller/utilities 2), 1 demo disk, users' guide (402p.), reference card, function keyboard template

System Requirements: Apple IIe/IIc, 128K, 2 disk drives/unidisk 3.5/hard drive, monitor, printer

Other Formats Available (not evaluated): Macintosh, Atari, Amiga

PROGRAM DESCRIPTION

This comprehensive word processing package is designed to provide the user with extended features such as a speller, macro capabilities and extended merge functions. A 50,000-word dictionary is available and can be customized. The user-defined macros can be linked as simple, repeating and conditional chains. Many merge applications are available and outlined in the documentation. An advanced user can combine the macro and merge functions to use data (address) files to create mailing labels, form letters, reports, lists, contracts and fill-in forms. The file size is limited to 16 megabytes and the file name to 15 characters. Documents may be edited at any stage of preparation. The user can change tabs, margins, justification, spacing (including proportional spacing), fonts, formats, hyphenation options, headers, footers and character alignment at any point during document creation. For bound documents, a binding width feature shifts text to the right on odd-numbered pages and to the left on even-numbered pages. Key words or logical operators can be searched. Text may be scrolled or moved in a variety of ways. The line spacing can be set in half-line increments starting at 0.5. Documents may be "locked" to prevent them from being edited. Automatic pagination can be invoked. The screen display closely resembles the printed output. The user can select from 32 defined print drivers or define a custom driver. Printer codes can be displayed on the screen before actually printing the document. The current date and time can be inserted in a document and is automatically updated whenever the document is retrieved or printed. In the event of a power failure, overflow files in the "work" directory can be recaptured using the provided utility program. Printer control codes can be inserted directly in the document. The user guide is divided into sections and includes a 10-lesson "Learning" section, table of contents, index and glossary.

PROGRAM EVALUATION

Document creation is simple and straightforward and default functions can be easily changed. "WordPerfect" operates through extensive use of the "open and close apple" keys. Gaining initial familiarity with the function keys can be time consuming but not difficult. Moving text both within a document and between documents is easy and efficient. The process of copying files is uncomplicated and the vast array of merge options are explained in detail. The process of setting/changing tabs, indentations, line spacing, justification, etc. is efficient and straightforward. Setting the line spacing to half a line is a positive feature because it allows the user to enter complex mathematical equations with subscripts, superscripts, divisors and quotients. The screen display is clear and uncluttered. Onscreen justification, hard space, wild cards (for file manipulation), and help function are some of the available features that make this package easy to use. The documentation is well organized, comprehensive and sequential. It has meaningful illustrations and is attractively formatted.

COMPARISON OF IBM - APPLE VERSIONS

This report was based on an initial evaluation of the IBM version. In reviewing the Apple version of "WordPerfect," the following notable differences were found:

1. The file size is limited to 16 megabytes. The suggested file length is between 20 and 70 pages. ProDOS limits the user to 51 files in the root directory.
2. The Speller is limited to 50,000 + words and does not allow phonetic lookup.
3. Sorts are limited to alphabetic order only.
4. Retrieving deleted text is limited to one level only.
5. Some commands require more keystrokes than used in the IBM version.

6. The following features and functions found in the IBM version are not included in the Apple version:
   a. thesaurus
   b. built-in mathematics functions
   c. window/split screen viewing
   d. timed backup feature
   e. tab ruler
   f. text columns, newspaper format and parallel columns
   g. outline feature
   h. table of contents, index and lists features
   i. typethrough ability
   j. exit to DOS without leaving the word processor
   k. password security
   l. Roman numerical style
   m. priority printing
   n. line draw feature
   o. interface with other packages
   p. classroom workbook
   q. fast save
   r. graphics feature
   s. automatic font change
   t. integrated formatting and printing functions
   u. automatic margin adjustments
   v. initial code storage
   w. expanded font capabilities
   x. expanded keyboard layout

The Apple version does retain the other features mentioned in this report, such as merge and macros, as well as very similar editing and print formatting capabilities.

STATUS

"WordPerfect" – Apple IIe version has been authorized as a **BASIC** learning resource for grades 10 to 12.

PURCHASE INFORMATION

Alberta schools may purchase this program for $97.50 (1989) less a 25% educational discount. Contact the Learning Resources Distributing Centre for warranty information.

SUMMARY OF AUTHORIZED SOFTWARE

January 1983 to December 1988

TITLE	PUBLISHER	GRADES	APPLE	IEM	MAC	STATUS	VOLUME
BUSINESS EDUCATION							
Alphabetic Keyboarding	South-Western Publishing Co.	7-12	• •	•		R	4
Apple Writer IIe	Claris Software	10-12	• •			R	4
AppleWorks (Version 2.1)	Claris Software	10-12	• •			B	8
Automated Accounting for the Microcomputer	South-Western Publishing Co.	10	• •	•		S	4
Automated Accounting for the Microcomputer (Canadian Version)	Gage Publishing	10	• •	•		R	5
Boyd's Clothiers	South-Western Publishing Co.	10	• •	•		S	5
Enable Learn (Version 2.0)	The Software Group	10-12		•		B	6
Enterprise Sandwich Shops	McGraw-Hill Ryerson Ltd.	11-12	• •	•		R	5
Format II (Enhanced)	Kensington Microware	10-12	•			R	4
Free Enterprise	Science Research Associates	11-12	• •	•		R	5
Gregg Keyboarding for Information Processing	McGraw-Hill Ryerson Ltd.	7-12	• •			S	4
Integrated Accounting (Education Version 3.20)	Bedford Software	10-12		•		B	7
Microcomputer Activities for Record Keeping	Houghton Mifflin Canada Ltd.	10-12	• •	o		R	5
Microcomputer Keyboarding	South-Western Publishing Co.	7-12	• •	•		R	4

KEY TO ABBREVIATIONS

Status (Resource Authorization)

- B Basic
- R Recommended
- S Supplementary

Volume (Location of Complete Evaluation Report)

- 4 - Computer Courseware Evaluations January 1983 to May 1985 (Volumes 1-3 are reprinted in Volume 4)
- 5 - Computer Courseware Evaluations June 1985 to March 1986
- 6 - Computer Courseware Evaluations April 1986 to December 1986
- 7 - Computer Courseware Evaluations January 1987 to December 1987
- 8 - Computer Courseware Evaluations January 1988 to December 1988

Apple/IBM/Macintosh

- • Authorized by Alberta Education
- o Available but not evaluated by Alberta Education
- • Compatible with Apple IIgs

TITLE	PUBLISHER	GRADES	APPLE	IBM	MAC	STATUS	VOLUME
BUSINESS EDUCATION (continued)							
Microcomputer Oriented Accounting	South-Western Publishing Co.	10	• •	•		S	4
Microsoft Word (Version 4 for IBM & 3.01 for Macintosh)	Microsoft Corporation	10–12		•	•	B	8
Money Manager	CAE Software	10–12	• •			S	6
Palmetto Insurance Co.	South-Western Publishing Co.	11–12	• •			S	5
Power-Base (Version 2.3)	Powerbase Systems Inc.	10–12		•		B	6
Reflex–The Data Base Manager (Version 1.12)	Borland International	10–12		•	o	B	6
Screenwriter II	Sierra	10–12	• •			R	4
Simulated Computer	Edusoft	10–12	•			S	4
Sounds Abound: An Accounting Simulation	Houghton Mifflin Canada Ltd.	10–12	• •	o		R	5
Touchtype	Software Spirit	10–12	• •			R	5
Twin, The (Version 1.4)	Mosaic Software	10–12		•		B	6
Video Gallery Sales & Service: An Automated Accounting Simulation	South-Western Publishing Co.	10–11	• •	o		S	5
Whatsit Corporation, The	Sunburst Communications	10–12	• •	o		S	5
WordPerfect (Version 5.0)	WordPerfect Corporation	10–12		•	o	B	8
Word Perfect for the Apple IIe	WordPerfect Corporation	10–12	• •			B	8
Wordstar 2000 Plus	Micropro International Corp.	10–12		•		B	6
COMPUTER LITERACY							
Alphabetic Keyboarding	South-Western Publishing Co.	7–12	• •	•		R	4
Apple Presents Apple	Claris Software	4–10	•			S	5
Computer Science I	Mindscape Inc.	10–12	• •	o		S	6
Gregg Keyboarding for Information Processing	McGraw-Hill Ryerson Ltd.	7–12	• •			S	4
Mastertype	Mindscape Inc.	4–9	• •	o	o	S	5

TITLE	PUBLISHER	GRADES	APPLE	IBM	MAC	STATUS	VOLUME
COMPUTER LITERACY (continued)							
Microcomputer Keyboarding	South-Western Publishing Co.	7-12	• •	•		R	4
Micros Made Easy	Science Research Associates	4-9	• •	•		S	5
Microtype, The Wonderful World of Paws	South-Western Publishing Co.	1-6	• •			S	8
Simulated Computer	Edusoft	10-12	•			S	4
Spectrum	Sunburst Communications	4-9	• •			S	5
Superkey	Bytes of Learning	4-9	• •			S	6
Visible Computer: 6502, The	Software Masters	10-12	•			S	5
Visible Computer: 8088, The	Software Masters	10-12		•		S	5
FINE ARTS							
Magic Piano	Edusoft	2-6	• •			S	7
Music Class, The: Note Reading	Wenger Corporation	7-9	• •			S	8
Music Class, The: Rhythm	Wenger Corporation	7-9	• •			S	8
Music Theory	MECC	7-9	• •			B, R	8
Music Theory Level - I	Maestro Music Inc.	7-9	• •			S	8
Music Theory Level - II	Maestro Music Inc.	7-9	• •			S	8
Music Theory Level - III	Maestro Music Inc.	7-9	• •			S	8
Practical Theory	Alfred Publishing	7-9	• •	o		B	8

KEY TO ABBREVIATIONS

Status (Resource Authorization)

- B Basic
- R Recommended
- S Supplementary

Volume (Location of Complete Evaluation Report)

- 4 - Computer Courseware Evaluations January 1983 to May 1985 (Volumes 1-3 are reprinted in Volume 4)
- 5 - Computer Courseware Evaluations June 1985 to March 1986
- 6 - Computer Courseware Evaluations April 1986 to December 1986
- 7 - Computer Courseware Evaluations January 1987 to December 1987
- 8 - Computer Courseware Evaluations January 1988 to December 1988

Apple/IBM/Macintosh

- • Authorized by Alberta Education
- o Available but not evaluated by Alberta Education
- • Compatible with Apple IIgs

73

TITLE	PUBLISHER	GRADES	APPLE	IBM	MAC	STATUS	VOLUME
FRENCH							
Apple Presente le Apple IIe	Claris Software	3–6	• •			S	7
AppleWorks (French Version 1.4)	Claris Software	4–12	• •			B	5
Associations 2	Éditions FM	3–9	• •			S	6
Bataille de Mots	Gessler Educational Software	6–12	• •	o		S	8
Differenciations	Editions FM	6–10	• •			S	6
French Achievement I: Vocabulary	Mindscape Inc.	10–12	• •	•		S	6
French for Mastery Software	D.C. Heath Canada Ltd.	10 FSL	• •	o		R	8
French Grammar Computerized I	Lingo Fun Inc.	10–12	• •	•		S	7
Homophones grammaticaux	Editions FM	5–12	• •	o		S	6
Je conjugue	Editions AD LIB Inc.	4–9	• •			S	7
L'Écrivain Public	Logidisque Inc.	5–9	• •			R	6
Math–Thématique 3	Houghton Mifflin Canada Ltd.	3	• •			R	5
Math–Thematique 3	Editions FM	3		•		R	8
Math–Thematique 4	Houghton Mifflin Canada Ltd.	4	• •			R	5
Math–Thematique 4	Editions FM	4		•		R	8
Math–Thematique 5	Houghton Mifflin Canada Ltd.	5	• •			R	5
Math–Thematique 5	Editions FM	5		•		R	8
Math–Thematique 6	Houghton Mifflin Canada Ltd.	6	• •			R	5
Math–Thematique 6	Editions FM	6		•		R	8
Méga-texte	Quebit Logiciels	ECS-3	•	o		R	7
Micro Scrabble	Leisure Genius	4–9	• •	o	o	S	8
Microthermo	Centre franco-ontarien de ressources pedagogiques	9	• •			S	7

TITLE	PUBLISHER	GRADES	APPLE	IBM	MAC	STATUS	VOLUME
LANGUAGE ARTS							
Bank Street Storybook	Mindscape Inc.	3-9	• •	o		S	8
Bank Street Writer III	Scholastic Inc.	2-12	• •	o		R	8
Cloze Plus Level C	Milliken Publishing Co.	2-5	• •			S	6
Cloze Plus Level D	Milliken Publishing Co.	3-6	• •			S	6
Cloze Plus Level E	Milliken Publishing Co.	4-6	• •			S	6
Cloze Plus Level F	Milliken Publishing Co.	5-6	• •			S	6
Crossword Magic	Mindscape Inc.	2-12	• •	o	o	S	8
Cut and Paste	Electronic Arts	7-9	•	o		S	6
Easy as ABC	Springboard Software	1-2	• •	o	o	S	5
Fay: The Word Hunter	Didatech Software	3-6	• •			S	6
Fay's Word Rally	Didatech Software	2-6	• •			S	5
Hinky Pinky Game, The	Mindscape Inc.	4-6	• •			S	6
How Can I Find It?	Sunburst Communications	4-6	• •			S	6
How to Identify the Main Idea	Science Research Associates	5-9	• •			S	6
M-ss-ng L-nks: Classics, Old and New	Sunburst Communications	6	• •	o		S	6
M-ss-ng L-nks: Microencyclopedia	Sunburst Communications	4-6	• •	o		S	6

KEY TO ABBREVIATIONS

Status (Resource Authorization)

- B Basic
- R Recommended
- S Supplementary

Volume (Location of Complete Evaluation Report)

- 4 - Computer Courseware Evaluations January 1983 to May 1985 (Volumes 1-3 are reprinted in Volume 4)
- 5 - Computer Courseware Evaluations June 1985 to March 1986
- 6 - Computer Courseware Evaluations April 1986 to December 1986
- 7 - Computer Courseware Evaluations January 1987 to December 1987
- 8 - Computer Courseware Evaluations January 1988 to December 1988

Apple/IBM/Macintosh

- • Authorized by Alberta Education
- o Available but not evaluated by Alberta Education
- • Compatible with Apple IIgs

TITLE	PUBLISHER	GRADES	APPLE	IBM	MAC	STATUS	VOLUME
LANGUAGE ARTS (continued)							
M-ss-ng L-nks: Young People's Literature	Sunburst Communications	4-6	• •	o		S	6
Magic Slate	Sunburst Communications	2-6	• •			R	8
		7-9	• •			S	8
Magic Slate II	Sunburst Communications	2-6	• •			R	8
		7-9	• •			S	8
Magic Spells	The Learning Company	2-6	• •	o		S	5
Mastertype's Writer	D.C. Heath Canada Ltd.	4-9	• •			S	8
MECC Writer	MECC	4-9	• •			S	8
Milliken Word Processor	Milliken Publishing Co.	3-9	• •	o		R	7
Mousewrite	Roger Wagner Publishing	4-9	• •			R	8
Newsroom, The	Springboard Software	4-9	• •	•		S	6
Reader Rabbit & the Fabulous Word Factory	The Learning Company	1-2	• •	o	o	S	5
Scholastic Multiscribe	Scholastic Inc.	4-9	• •			R	8
Spell It!	Davison & Associates Inc.	4-9	• •	o		S	6
Stickybear Opposites	Weekly Reader Family Software	1	• •			S	5
Subject-Verb Agreement	Mindscape Inc.	6	• •			S	6
Word Attack	Davison & Associates Inc.	4-9	• •	o	o	S	6
Word Quest	Sunburst Communications	4-6	• •	o		S	6
Word Spinner	The Learning Company	2-6	• •	•		S	5
MATHEMATICS							
Adding Fractions	Mindscape Inc.	5-8	• •	•		S	5
Algebra Drill & Practice I	Conduit	9-12	• •	o		S	5
Algebra Drill & Practice II	Conduit	10-12	• •	o		S	5
Algebra Word Problems II: Area, Perimeter & Lever	Mindscape Inc.	10	• •			S	7

TITLE	PUBLISHER	GRADES	APPLE	IBM MAC	STATUS	VOLUME
MATHEMATICS (continued)						
Algebra Word Problems III: Mixture, Coin & Investment	Mindscape Inc.	8–10	• •		S	5
Alien Addition	Developmental Learning Materials	1–6	•	o	S	4
Alligator Mix	Developmental Learning Materials	1–6	•	o	S	4
Basic Math Techniques	Merlan Scientific Ltd.	7–12	• •		S	4
Bumble Games	The Learning Company	ECS–5	• •		S	4
Bumble Plot	The Learning Company	3–6	• •		S	4
Carrying: Regrouping for Addition	Renaissance Learning Systems	3–4	• •		S	7
Code Quest	Sunburst Communications	4–7	• •	o	S	5
Computer Graphing Experiments Volume 1	Addison–Wesley Publishers	10–12	• •		R	4
Computer Graphing Experiments Volume 2	Addison–Wesley Publishers	10–12	• •		R	4
Computer Graphing Experiments Volume 3	Addison–Wesley Publishers	10–12	• •		R	4
Count and Add	Edusoft	ECS–4	• •		S	4
Counters	Sunburst Communications	1	• •		S	5
Demolition Division	Developmental Learning Materials	1–6	•	o	S	4
Dividing Fractions	Mindscape Inc.	7–8	• •	•	S	5
Dragon Mix	Developmental Learning Materials	1–6	•	o	S	4

KEY TO ABBREVIATIONS

Status (Resource Authorization)

- B Basic
- R Recommended
- S Supplementary

Volume (Location of Complete Evaluation Report)

- 4 – Computer Courseware Evaluations January 1983 to May 1985 (Volumes 1-3 are reprinted in Volume 4)
- 5 – Computer Courseware Evaluations June 1985 to March 1986
- 6 – Computer Courseware Evaluations April 1986 to December 1986
- 7 – Computer Courseware Evaluations January 1987 to December 1987
- 8 – Computer Courseware Evaluations January 1988 to December 1988

Apple/IBM/Macintosh

- • Authorized by Alberta Education
- o Available but not evaluated by Alberta Education
- • Compatible with Apple IIgs

TITLE	PUBLISHER	GRADES	APPLE	IBM	MAC	STATUS	VOLUME
MATHEMATICS (continued)							
Early Games for Young Children	Springboard Software	1	• •	o	o	S	5
Equations	Mindscape Inc.	7–11	• •	•		S	6
Equations II	Mindscape Inc.	8–11	• •	•		S	5
Equations III	Mindscape Inc.	10–12	• •			S	6
Estimation	Lawrence Hall of Science	1	• •			S	5
Explorer Metros	Sunburst Communications	4–9	• •			S	4
Exploring Tables and Graphs Level 1	Weekly Reader Family Software	3–4	• •			S	5
Exploring Tables and Graphs Level 2	Weekly Reader Family Software	5–6	• •			S	5
Exponential Notation	Merlan Scientific Ltd.	7–12	• •			S	4
Factoring Algebraic Expressions	Mindscape Inc.	10	• •	•		S	5
Factory, The	Sunburst Communications	4–9	• •	o		S	5
Fast Facts	Edusoft	1–6	• •			S	5
Fay: The Math Woman	Didatech Software	2–3	• •	o		S	5
Fraction Factory	Springboard Software	3–6	• •	o		S	5
Fractions Decimals	Sterling Swift Publishing Co.	7–9	• •			S	4
Geometric Concepts: Area	Jostens Learning Systems Inc.	6–9	• •			S	5
Geometric Concepts: Perimeter	Jostens Learning Systems Inc.	5–9	• •			S	5
Geometric PreSupposer, The: Points & Lines	Sunburst Communications	7–9	• •			S	8
Geometric Supposer, The: Quadrilaterals	Sunburst Communications	7–9	• •	o		S	8
Geometric Supposer, The: Triangles	Sunburst Communications	4–10	• •	o		S	6
Graphing Equations	Conduit	10–12	•			S	6

TITLE	PUBLISHER	GRADES	APPLE	IBM	MAC	STATUS	VOLUME
MATHEMATICS (continued)							
Graphing Linear Functions	Mindscape Inc.	9–10	• •	•		S	5
Green Globs & Graphing Equations	Sunburst Communications	10–12	• •	o		S	5
Integers Integer Fast Facts	Edusoft	4–9	• •			S	5
King's Rule, The	Sunburst Communications	4–9	• •	o		S	5
Learning About Numbers	C & C Software	1–4	• •			S	5
Math Blaster	Davidson & Associates Inc.	1–6	• •	o	o	S	5
Math Sequences	Milliken Publishing Co.	1–8	• •			R	5
Math Strategies: Problem Solving	Science Research Associates	6–12	• •			S	5
Math Voyager	Computer Learning Services	2–6	• •			S	5
Mathematics Activities Courseware 1 (MAC 1)	Houghton Mifflin Canada Ltd.	1	• •	•		R	6
Mathematics Activities Courseware 2 (MAC 2)	Houghton Mifflin Canada Ltd.	2	• •	•		R	6
Mathematics Activities Courseware 3 (MAC 3)	Houghton Mifflin Canada Ltd.	3	• •	•		R	5
Mathematics Activities Courseware 4 (MAC 4)	Houghton Mifflin Canada Ltd.	4	• •	•		R	5

KEY TO ABBREVIATIONS

Status (Resource Authorization)

- B Basic
- R Recommended
- S Supplementary

Volume (Location of Complete Evaluation Report)

- 4 – Computer Courseware Evaluations January 1983 to May 1985 (Volumes 1–3 are reprinted in Volume 4)
- 5 – Computer Courseware Evaluations June 1985 to March 1986
- 6 – Computer Courseware Evaluations April 1986 to December 1986
- 7 – Computer Courseware Evaluations January 1987 to December 1987
- 8 – Computer Courseware Evaluations January 1988 to December 1988

Apple/IBM/Macintosh

- • Authorized by Alberta Education
- o Available but not evaluated by Alberta Education
- • Compatible with Apple IIgs

TITLE	PUBLISHER	GRADES	APPLE	IBM	MAC	STATUS	VOLUME
MATHEMATICS (continued)							
Mathematics Activities Courseware 5 (MAC 5)	Houghton Mifflin Canada Ltd.	5	• •	•		R	5
Mathematics Activities Courseware 6 (MAC 6)	Houghton Mifflin Canada Ltd.	6	• •	•		R	5
Mathematics Activities Courseware 7 (MAC 7)	Houghton Mifflin Canada Ltd.	7	• •	•		R	5
Mathematics Activities Courseware 8 (MAC 8)	Houghton Mifflin Canada Ltd.	8–9	• •	•		R	7
Mathematics: Level A	Science Research Associates	1–2	• •	o		R	5
Mathematics: Level B	Science Research Associates	3–4	• •	o		R	5
Mathematics: Level C	Science Research Associates	5–6	• •	o		R	5
Mathematics: Level D	Science Research Associates	7–9	• •	o		R	5
Measurement	Merlan Scientific Ltd.	7–12	• •			S	4
Meteor Multiplication	Developmental Learning Materials	1–6	•	o		S	4
Minus Mission	Developmental Learning Materials	1–6	•	o		S	4
Miscellaneous	Merlan Scientific Ltd.	7–12	• •			S	4
Motion Geometry	Ginn and Company	7–8	• •			S	7
Motion Geometry	Nelson Canada Ltd.	7–9	• •			S	7
Multiplying Fractions	Mindscape Inc.	5–8	• •	•		S	5
Number Farm	Developmental Learning Materials	1	• •	o		S	5
Number Quest	Sunburst Communications	7–9	• •			S	7
Percents	Media Materials	6–9	• •			S	5
Piece of Cake	Springboard Software	1–6	• •	o		S	5
Power Drill	Sunburst Communications	7–9	• •	o		S	7
Problem Solving in Algebra	Encyclopedia Britannica	8–12	• •			S	5

TITLE	PUBLISHER	GRADES	APPLE	IBM	MAC	STATUS	VOLUME
MATHEMATICS (continued)							
Quations	Scholastic Inc.	4–6	•	•		S	7
Ratios and Proportions	Media Materials Inc.	6–9	•	•		S	5
Royal Rules, The	Sunburst Communications	7–9	•	•	o	S	8
Simultaneous Linear Equations	Mindscape Inc.	9–11	•	•	•	S	5
Solving Fractional Equations	Mindscape Inc.	10–12	•	•		S	6
Solving Quadratic Equations	Mindscape Inc.	9–12	•	•	•	S	4
Spectrum	Sunburst Communications	4–9	•	•		S	5
Stickybear Math I	Weekly Reader Family Software	1–4	•	•	o	S	5
Stickybear Numbers	Weekly Reader Family Software	1	•	•	o	S	5
Stickybear Shapes	Weekly Reader Family Software	1	•	•		S	5
Subtracting Mixed Fractions	Mindscape Inc.	7–8	•	•	•	S	5
Super Factory, The	Sunburst Communications	5–6	•	•	o	S	7
Whatsit Corporation, The	Sunburst Communications	10–12	•	•	o	S	5
Whole Numbers	Sterling Swift Publishing Co.	1–9	•	•		S	4

KEY TO ABBREVIATIONS

Status (Resource Authorization)

- B Basic
- R Recommended
- S Supplementary

Volume (Location of Complete Evaluation Report)

- 4 – Computer Courseware Evaluations January 1983 to May 1985 (Volumes 1–3 are reprinted in Volume 4)
- 5 – Computer Courseware Evaluations June 1985 to March 1986
- 6 – Computer Courseware Evaluations April 1986 to December 1986
- 7 – Computer Courseware Evaluations January 1987 to December 1987
- 8 – Computer Courseware Evaluations January 1988 to December 1988

Apple/IBM/Macintosh

- • Authorized by Alberta Education
- o Available but not evaluated by Alberta Education
- • Compatible with Apple IIgs

TITLE	PUBLISHER	GRADES	APPLE	IBM	MAC	STATUS	VOLUME
PERSONAL DEVELOPMENT							
Choices	CSG Corporation	10–12	• •	•		B	8
Life Choices Simulation	ICAL	10–12		•		B	8
PROBLEM SOLVING							
Code Quest	Sunburst Communications	4–7	• •	o		S	5
Factory, The	Sunburst Communications	4–9	• •	o		S	5
Gears	Sunburst Communications	7–9	• •	o		S	7
Gertrude's Puzzles	The Learning Company	1–6	• •	o		S	4
Gertrude's Secrets	The Learning Company	ECS–4	• •	o		S	4
In Search of Wargo: Zandar III & IV	SVE	4–6	• •			S	7
King's Rule, The	Sunburst Communications	4–9	• •	o		S	5
Logic Builders	Scholastic Inc.	2–6	• •			S	6
Math Strategies: Problem Solving	Science Research Associates	6–12	• •			S	5
Mathematics Activities Courseware 1 (MAC 1)	Houghton Mifflin Canada Ltd.	1	• •	•		R	6
Mathematics Activities Courseware 2 (MAC 2)	Houghton Mifflin Canada Ltd.	2	• •	•		R	6
Mathematics Activities Courseware 3 (MAC 3)	Houghton Mifflin Canada Ltd.	3	• •	•		R	5
Mathematics Activities Courseware 4 (MAC 4)	Houghton Mifflin Canada Ltd.	4	• •	•		R	5
Mathematics Activities Courseware 5 (MAC 5)	Houghton Mifflin Canada Ltd.	5	• •	•		R	5
Mathematics Activities Courseware 6 (MAC 6)	Houghton Mifflin Canada Ltd.	6	• •	•		R	5
Mathematics Activities Courseware 7 (MAC 7)	Houghton Mifflin Canada Ltd.	7	• •	•		R	5
Mathematics Activities Courseware 8 (MAC 8)	Houghton Mifflin Canada Ltd.	8–9	• •	•		R	7

TITLE	PUBLISHER	GRADES	APPLE	IBM MAC	STATUS	VOLUME
PROBLEM SOLVING (continued)						
Memory: A First Step in Problem Solving	Sunburst Communications	1-6		•	S	5
Moptown Hotel	The Learning Company	2-4	• •		R	5
Moptown Parade	The Learning Company	1-3	• •		R	5
Number Quest	Sunburst Communications	7-9	• •		S	7
Power Drill	Sunburst Communications	7-9	• •	o	S	7
Rocky's Boots	The Learning Company	3-6	• •	•	S	4
Safari Search	Sunburst Communications	2-6	• •	o	S	7
Spectrum	Sunburst Communications	6-10	• •		S	5
Super Factory, The	Sunburst Communications	5-6	• •	o	S	7
Teddy's Playground	Sunburst Communications	ECS-4	• •		S	7
Tonk in the Land of Buddy Bots	Mindscape Inc	1-3	• •	•	S	6
PRODUCTIVITY SOFTWARE						
Apple Writer IIe	Claris Software	10-12	• •		R	4
AppleWorks (Version 2.1)	Claris Software	1-12	• •		B	8
Bank Street School Filer	Sunburst Communications	4-9	• •		B	8
Bank Street Writer III	Scholastic Inc	2-12	• •	o	R	8

KEY TO ABBREVIATIONS

Status (Resource Authorization)

- B Basic
- R Recommended
- S Supplementary

Volume (Location of Complete Evaluation Report)

- 4 - Computer Courseware Evaluations January 1983 to May 1985 (Volumes 1-3 are reprinted in Volume 4)
- 5 - Computer Courseware Evaluations June 1985 to March 1986
- 6 - Computer Courseware Evaluations April 1986 to December 1986
- 7 - Computer Courseware Evaluations January 1987 to December 1987
- 8 - Computer Courseware Evaluations January 1988 to December 1988

Apple/IBM/Macintosh

- • Authorized by Alberta Education
- o Available but not evaluated by Alberta Education
- • Compatible with Apple IIgs

TITLE	PUBLISHER	GRADES	APPLE	IBM	MAC	STATUS	VOLUME
PRODUCTIVITY SOFTWARE (continued)							
Cut and Paste	Electronic Arts	7–9	•	o		S	6
Enable Learn (Version 2.0)	The Software Group	10–12		•		B	6
Format II (Enhanced)	Kensington Microware	10–12	•			R	4
Magic Slate	Sunburst Communications	2–6	• •			R	8
		7–9	• •			S	8
Magic Slate II	Sunburst Communications	2–6	• •			R	8
		7–9	• •			S	8
Mastertype's Writer	D.C. Heath Canada Ltd.	4–9	• •			S	8
MECC Writer	MECC	4–9	• •			S	8
Microsoft Word (Version 4.0 IBM & 3.01 Macintosh)	Microsoft Corporation	10–12		•	•	B	8
Milliken Word Processor	Milliken Publishing Co.	3–9	• •	o		R	7
Mousewrite	Roger Wagner Publishing	4–9	• •			R	8
Newsroom, The	Springboard Software	4–9	• •	•		S	6
Power-Base (Version 2.3)	PowerBase Systems Inc.	10–12		•		B	6
Reflex – The Database Manager (Version 1.12)	Borland International	10–12		•	o	B	6
Scholastic MultiScribe	Scholastic Inc.	4–9	• •			R	8
Screenwriter II	Sierra	10–12	• •			R	4
Touchtype	Software Spirit	10–12	• •			R	5
Twin, The (Version 1.4)	Mosaic Software	10–12		•		B	6
WordPerfect (Version 5.0)	WordPerfect Corporation	10–12		•	o	B	8
WordPerfect for the Apple IIe	WordPerfect Corporation	10–12	• •			B	8
Wordstar 2000 Plus	Micropro International Corp.	10–12		•		B	6
SCIENCE							
Basic Concepts	Merlan Scientific Ltd.	12	• •			S	5
Basic Math Techniques	Merlan Scientific Ltd.	7–12	• •			S	4

TITLE	PUBLISHER	GRADES	APPLE	IBM	MAC	STATUS	VOLUME
SCIENCE (continued)							
Cellular Reproduction	Merlan Scientific Ltd.	11	•	•		S	5
Compete	Conduit	10–12	•	•		S	4
Electrical Energy	Merlan Scientific Ltd.	12	•	•		S	5
Explorer Metros	Sunburst Communications	4–9	•	•		S	4
Exponential Notation	Merlan Scientific Ltd.	7–12	•	•		S	4
Flame Life	Queen's University	6&9	•	•		S	5
Haber	Conduit	10–12	•	•		S	4
Hydrogen Spectrum	Heinemann Computers in Education	12	•			S	5
Ideal Gases	Compress	10–12	•	•		S	5
Introduction to Circuits	Merlan Scientific Ltd.	12	•	•		S	5
Lenses	Heinemann Computers in Education	12	•			S	5
Longitudinal Wave Demonstrator	Merlan Scientific Ltd.	11	•	•		S	5
Measurement	Merlan Scientific Ltd.	7–12	•	•		S	4
Measurements: Length, Mass and Volume	Focus Media Inc.	4–8	•	•		S	5
Microchem	Collier MacMillan Canada Ltd.	10–12	•	•		S	4
Miscellaneous	Merlan Scientific Ltd.	7–12	•	•		S	4

KEY TO ABBREVIATIONS

Status (Resource Authorization)

- B Basic
- R Recommended
- S Supplementary

Volume (Location of Complete Evaluation Report)

- 4 – Computer Courseware Evaluations January 1983 to May 1985 (Volumes 1-3 are reprinted in Volume 4)
- 5 – Computer Courseware Evaluations June 1985 to March 1986
- 6 – Computer Courseware Evaluations April 1986 to December 1986
- 7 – Computer Courseware Evaluations January 1987 to December 1987
- 8 – Computer Courseware Evaluations January 1988 to December 1988

Apple/IBM/Macintosh

- • Authorized by Alberta Education
- o Available but not evaluated by Alberta Education
- • Compatible with Apple IIgs

TITLE	PUBLISHER	GRADES	APPLE	IBM	MAC	STATUS	VOLUME
SCIENCE (continued)							
Oil Drop	Edutech	12	• •			S	5
Parabolic Motion	Edutech	10	• •			S	5
Periodic Motion	Merlan Scientific Ltd.	11	• •			S	5
Periodic Waves: Basic Concepts	Merlan Scientific Ltd.	11	• •			S	5
Ray Tracer	Vernier Software	10–12	• •			S	5
Resistance	Merlan Scientific Ltd.	12	• •			S	5
Rocky's Boots	The Learning Company	3–6	• •	•		S	4
Science Toolkit Master Module	Broderbund Software	4–6	• •			S	7
Transverse Waves	Heinemann Computers in Education	11	•			S	5
Water Pollution	Educational Materials & Equipment	11	• •			S	5
Wave Addition II	Vernier Software	11–12	• •			S	5
Wave Demonstrations	Merlan Scientific Ltd.	11	• •			S	5
Waves in a Linear Medium: Introduction	Merlan Scientific Ltd.	11	• •			S	5
Waves in a Linear Medium: Superposition	Merlan Scientific Ltd.	11	• •			S	5
Writing Chemical Formulas	Mindscape Inc.	10	• •			S	5
SOCIAL STUDIES							
Crosscountry Canada	Didatech Software	5	• •			R	8
Discover the World	Scholastic Inc.	5	• •	o		S	8
Quest for Canada	Scholastic Inc.	5	• •	o		S	8
Stickybear Town Builder	Weekly Reader Family Software	2	• •			R	8

86

SOFTWARE UNSUITABLE FOR AUTHORIZATION

January 1988 to December 1988

SOFTWARE UNSUITABLE FOR AUTHORIZATION – JANUARY 1988 TO DECEMBER 1988

The following list identifies software resources reviewed by the Alberta Education Resource Evaluation Team from January 1988 to December 1988 and found unsuitable for authorized use in Alberta Schools. The title and publisher of these resources are listed alphabetically by subject area.

BUSINESS EDUCATION SOFTWARE

TITLE	PUBLISHER	GRADES
Abacus	Abacus Marketing Inc.	10–12
Accounting Tutorial	South-Western Publishing Company	10–12
Appleworks – Integrated Applications for the Microcomputer	South-Western Publishing Company	10–12
Back to Basics Accounting – GL (Apple IIe/IIc Version)	Peachtree Software	10–12
Back to Basics Accounting – GL, AR, AP (IBM Version)	Peachtree Software	10–12
Developing Editing Skills on the Apple	McGraw-Hill Ryerson Ltd.	10–12
Developing Editing Skills on the IBM PC	McGraw-Hill Ryerson Ltd.	10–12
General Ledger Accounting System for the Apple IIe	BPI Systems Inc.	10–12
Microcomputer Accounting Applications Featuring Summation	McGraw-Hill Ryerson Ltd.	11–12
Mouseword	Version Soft	7–12
Pro-Grammar/Pro-Sentence	South-Western Publishing Company	10–12
Resume Disk and User's Guide (IBM and Apple Versions)	McGraw-Hill Ryerson Ltd.	10–12
Resume Instructor's Version (IBM and Apple Versions)	McGraw-Hill Ryerson Ltd.	10–12
Scholastic PFS: File/Report	Scholastic Inc.	7–12
Wordstar Professional Release 4	Micropro International Corporation	10–12

COMPUTER LITERACY SOFTWARE

TITLE	PUBLISHER	GRADES
Alice: The Personal Pascal	Software Channels Inc.	10–12
Betabots	D.C. Heath Canada Ltd.	1–4
Creature Creator	Britannica Learning Corporation	K–3
Introduction to Programming Languages	Addison-Wesley Publishers	4–12
Smartype	McGraw-Hill Ryerson Ltd.	4–6
Stickybear Basic	Weekly Reader Family Software	4–12
Success with Typing	Scholastic Inc.	5–12
Typequick	Typequick PTY LTD.	Not specified

SOFTWARE UNSUITABLE FOR AUTHORIZATION – JANUARY 1988 TO DECEMBER 1988

FINE ARTS SOFTWARE

TITLE	PUBLISHER	GRADES
Create with Garfield – Deluxe Edition	Developmental Learning Materials	1–12
Stickybear Drawing	Weekly Reader Family Software	2–12
The Music Class: Fundamentals	Wenger Corporation	Not Specified
The Theatergame	Kinko Academic Courseware Exchange	7–12

FRENCH LANGUAGE SOFTWARE

TITLE	PUBLISHER	GRADES
Banque des Mots	Mindscape Inc.	7–12
Le Mystere de la Montre d'Or	Bill Buchanan	10–12
Les Etoiles de Mathematiques, Operations de Base	Sam Girgis	1–6
Les Etoiles de Mathematiques, Problemes	Sam Girgis	1–6
Les Etoiles Filantes du Français	Sam Girgis	Not Specified
Whodunit	Gessler Educational Software	7–12

LANGUAGE ARTS SOFTWARE

TITLE	PUBLISHER	GRADES
Ace Reporter	Mindplay	2–6
Alphabetization Sequences	Milliken Publishing Company	1–8
Basic Skills Series – Level 3	Education Skills Corporation (Wordware)	3
Basic Skills Series – Level 7	Education Skills Corporation (Wordware)	7
Basic Skills Series – Level 11	Education Skills Corporation (Wordware)	11
Create with Garfield – Deluxe Edition	Developmental Learning Materials	1–12
Flights into Fiction	Focus Media Inc.	3–7
Fourword and Wordlift	Milliken Publishing company	2–12
Holt Reading Skills Extender Grade 3	Holt Rinehart and Winston Canada Ltd.	3
Mastertype's Writer Reading Activity Disks – Level 6	D.C. Heath Canada Ltd.	6
Monty Plays Scrabble	Ritam Corporation	10–12
Quill	D.C. Heath Canada Ltd.	3–12
Race the Clock	Mindplay	K–6
Reference Micro Mysteries	Focus Media Inc.	4–8
Scholastic PFS: Write	Scholastic Inc.	7–12

LANGUAGE ARTS SOFTWARE (continued)

TITLE	PUBLISHER	GRADES
Scholastic the Newsroom	Scholastic Inc.	Not Specified
Sensible Writer	Sensible Software Inc.	7–12
Sentence Combining I	Milliken Publishing Company	4–8
Sentence Combining II	Milliken Publishing Company	6–9
Sound Ideas: Consonants and Vowels	Houghton Mifflin Canada Ltd.	K–6
Stickybear Parts of Speech	Weekly Reader Family Software	K–3
Storybook Starters	Mindscape Inc.	3–9
Syllable Attack	Lakusta Educational Software	4–6
The Muppet Word Book	Sunburst Communications	K–1
The Spelling System	Milliken Publishing Company	4–8
The Writing Adventure	Developmental Learning Materials	4–12
Word Detective	Sunburst Communications	3–12
Word Pairs	Mindscape Inc.	7–12
Writer Rabbit	The Learning Company	K–5
Writing with a Micro: Before Word Processing and Beyond	D.C. Heath Canada Ltd.	4–12

MATHEMATICS SOFTWARE

TITLE	PUBLISHER	GRADES
Area and Volume	Impact Educational Software Company	9–12
Basic Math Facts	Houghton Mifflin Canada Ltd.	1–6
Basic Skills Series – Level 3	Educational Skills Corporation (Wordware)	3
Basic Skills Series – Level 7	Educational Skills Corporation (Wordware)	7
Basic Skills Series – Level 11	Educational Skills Corporation (Wordware)	11
Basic Statistical Concepts	Frank W. Carlborg	10–12
Borrowing: Regrouping for Subtraction	Renaissance Learning Systems	1–6
Cube Builder	HRM Software	6–12
Data Hurdles	Word Book Discovery	5–12
Exponents and Logarithms	Microphys	10–12
Fact Master	Morning Star Inc.	1–6
Factorials and Counting Principle	Microphys	10–12
Geometric Progressions	Microphys	10–12
Introductory Statistics	Addison-Wesley Publishers	12
Les Etoiles de Mathematiques, Operations de Base	Sam Girgis	1–6
Les Etoiles de Mathematiques, Problemes	Sam Girgis	1–6
Locus	Impact Educational Software	9–12
Math #1: Algebra I	Decision Development Corporation	3–7
Math #3: Word Problems the Twister	Decision Development Corporation	3–12
Math Lab: Algebra I	Scholastic Inc.	8–11

MATHEMATICS SOFTWARE (continued)

TITLE	PUBLISHER	GRADES
Math Prep 7: Algebra	McGraw-Hill Ryerson Ltd.	7
Math Prep 7: Equations	McGraw-Hill Ryerson Ltd.	7
Math Prep 7: Integers	McGraw-Hill Ryerson Ltd.	7
Math Prep 7: Motion Geometry	McGraw-Hill Ryerson Ltd.	7
Math Prep 7: Perimeter and Area	McGraw-Hill Ryerson Ltd.	7
Math Prep 7: Problem Solving	McGraw-Hill Ryerson Ltd.	7
Math Prep 7: Ratios	McGraw-Hill Ryerson Ltd.	7
Math Prep 7: Whole Numbers	McGraw-Hill Ryerson Ltd.	7
Math Prep 8: Algebra	McGraw-Hill Ryerson Ltd.	8
Math Prep 8: Equations	McGraw-Hill Ryerson Ltd.	8
Math Prep 8: Fractions	McGraw-Hill Ryerson Ltd.	8
Math Prep 8: Graphing	McGraw-Hill Ryerson Ltd.	8
Math Prep 8: Integers	McGraw-Hill Ryerson Ltd.	8
Math Prep 8: Powers	McGraw-Hill Ryerson Ltd.	8
Math Prep 8: Ratios and Proportions	McGraw-Hill Ryerson Ltd.	8
Math Prep 8: Reflections	McGraw-Hill Ryerson Ltd.	8
Math Prep 9: Algebra	McGraw-Hill Ryerson Ltd.	9
Math Prep 9: Circumference and Area	McGraw-Hill Ryerson Ltd.	9
Math Prep 9: Equations	McGraw-Hill Ryerson Ltd.	9
Math Prep 9: Fractions	McGraw-Hill Ryerson Ltd.	9
Math Prep 9: Graphing Relations	McGraw-Hill Ryerson Ltd.	9
Math Prep 9: Rotations	McGraw-Hill Ryerson Ltd.	9
Math Prep 9: Statistics and Probability	McGraw-Hill Ryerson Ltd.	9
Math Prep 9: Surface Area and Volume	McGraw-Hill Ryerson Ltd.	9
Math Shop	Scholastic Inc.	6–8
Mathematics Problem Solving Software Level 1	Addison-Wesley Publishers	1
Mathematics Problem Solving Software Level 2	Addison-Wesley Publishers	2
Mathematics Problem Solving Software Level 3	Addison-Wesley Publishers	3
Mathematics Problem Solving Software Level 4	Addison-Wesley Publishers	4
Mathematics Problem Solving Software Level 5	Addison-Wesley Publishers	5
Mathematics Problem Solving Software Level 6	Addison-Wesley Publishers	6
Mathematics Problem Solving Software Level 7	Addison-Wesley Publishers	7
Mathematics Problem Solving Software Level 8	Addison-Wesley Publishers	8
Mumath	Microsoft Corporation	12
Pick the Numbers	D.C. Heath Canada Ltd.	4–7
Probability	Microphys	10–12
Range, Variance, Standard Deviation	Microphys	11–12
Ratio and Proportion	Mindscape Inc.	8–11
Understanding Charts and Graphs	SVE	4–6
Understanding Word Problems	SVE	4–6

SOFTWARE UNSUITABLE FOR AUTHORIZATION – JANUARY 1988 TO DECEMBER 1988

PERSONAL DEVELOPMENT SOFTWARE

TITLE	PUBLISHER	GRADES
Career Factory	Chautauqua Computer Systems	10–12
Dr. B. Careful	Coursemaker International Inc.	6–11
Insight	Bytes of Learning	7–12
Personal Career Directions	Software Research Corporation	10–12
Quadrant - Job Interview Skills	University of Toronto, Guidance Centre	10–12
Quadrant - Quick Tips on Job Hunting	University of Toronto, Guidance Centre	10–12
Quadrant - Tips on Dealing with Job Loss	University of Toronto, Guidance Centre	10–12
The Right Job	Sunburst Communications	7–12

PROBLEM-SOLVING SOFTWARE

TITLE	PUBLISHER	GRADES
Building Perspective	Sunburst Communications	4–12
Calliope 128	Innovision	10–12
Codes and Cyphers	Weekly Reader Family Software	3–12
Comparison Kitchen	Developmental Learning Materials	K–2
Conceptor	Mentor Learning Systems	7–12
Count Color Create	Dechant, Jeanette	K–2
Dress Richochet	DIL	K–1
Fish Scales	Developmental Learning Materials	K–2
Getting Around	DIL	K–1
Hot–Cold	DIL	K–1
Kinder Koncepts	Midwest Software	K–1
Microzine 2	Scholastic Inc.	4–12
Microzine 4	Scholastic Inc.	4–12
Microzine 5	Scholastic Inc.	4–12
Microzine 6	Scholastic Inc.	4–12
Microzine 7	Scholastic Inc.	4–12
Microzine 8	Scholastic Inc.	4–12
Microzine 9	Scholastic Inc.	4–12
Microzine 10	Scholastic Inc.	4–12
Microzine 12	Scholastic Inc.	4–12
Microzine 13	Scholastic Inc.	4–12
Microzine 14	Scholastic Inc.	4–12
Microzine 15	Scholastic Inc.	4–12
Microzine 16	Scholastic Inc.	4–12
Richochet's Costumes	DIL	K–1
Sharp–Not Sharp	DIL	K–1
Thought Problems for Critical Thinking Skills	Friend-Lee Software	10–12
Treasure Hunt/Voyage in Space	DIL	K–1
Zoom's Gift	DIL	K–1

SOFTWARE UNSUITABLE FOR AUTHORIZATION – JANUARY 1988 TO DECEMBER 1988

PRODUCTIVITY SOFTWARE

TITLE	PUBLISHER	GRADES
Friendly Filer	Grolier Educational Publishing	4-12
Mouseword	Version Soft	7-12
Scholastic PFS: File/Report	Scholastic Inc.	7-12
Scholastic PFS: Write	Scholastic Inc.	7-12
Sensible Grammar	Sensible Software Inc.	7-12
Sensible Speller	Sensible Software Inc.	7-12
Sensible Writer	Sensible Software Inc.	7-12
Survey Taker	Scholastic Inc.	4-8

SCIENCE SOFTWARE

TITLE	PUBLISHER	GRADES
Genetic Engineer's Toolbox	HRM Software	8-12
Geological History	Sunburst Communications	8-12
Geologists at Work	Sunburst Communications	8-12
M-ss-ng-L-nks Science Disk	Sunburst Communications	3-12
Nutrition Wizard	Center for Science in the Public Interest	7-12
Planetary Construction Set	Sunburst Communications	8-12
Project Space Station	Hesware	7-12
Scholastic PFS: Life Science Database	Scholastic Inc.	7-12
Scholastic PFS: Physical Science Database	Scholastic Inc.	7-12
Science #1: The Environment	Decision Development Corporation	4-6
The Halley Project	Mindscape Inc.	5-12
The Toy Shop	Broderbund Software	7-12
Wilderness	Electronic Arts	Not Specified

SOCIAL STUDIES SOFTWARE

TITLE	PUBLISHER	GRADES
Building a Nation: Canada and the CPR	Entrex Software	5-10
Continents and Countries	Mindscape Inc.	5-12
Crusades	Scholastic Inc.	7-10
Decision, Decisions – Urbanization	Tom Snyder Productions	7-12
Diary of Back River	Class Software	5-11
Discovery and Exploration	Mindscape Inc.	5-8
Fort Walsh	Class Software	5-11
Into the Unknown – Voyages 1 and 2	Focus Media Inc.	4-8
Map Maker	D.C. Heath Canada Ltd.	4-12
Non-Western Cultures	Focus Media Inc.	6-12

SOCIAL STUDIES SOFTWARE (continued)

TITLE	PUBLISHER	GRADES
Rebellion in the West	Scholastic Inc.	7–11
Scholastic PFS: World Geography: Cultures and Economics	Scholastic Inc.	7–12
The Language of Maps Series A: The Surface of the Earth	Focus Media Inc.	3–8
The Language of Maps Series B: Location and Distance	Focus Media Inc.	3–8
The Spy's Adventures in Europe	Polarware	4–12
The Spy's Adventures in North America	Polarware	4–12
Travels with Za-Zoom	Focus Media Inc.	4–8
Up the Creek	Class Software	4–10
Wagons West	Focus Media Inc.	5–8
Where in the USA is Carmen Sandiego	Broderbund Software	4–9
World Geography –Asia	Class Software	4–9
World Geography –Europe	Class Software	4–9
World Geography –South America	Class Software	4–9

TEACHER UTILITY SOFTWARE

TITLE	PUBLISHER	GRADES
Fact Sheets	Hartley Courseware Inc.	Teachers
Game Frame One	Houghton Mifflin Canada Ltd.	Teachers
Game Frame Two	Houghton Mifflin Canada Ltd.	Teachers
Idea Invasion	Developmental Learning Materials	Teachers

DISCONTINUED SOFTWARE

January 1988 to December 1988

The following is a list of software titles authorized by Alberta Education, but discontinued by their publishers. Please note that the discontinued "Bank Street Writer" programs have been replaced by "Bank Street Writer III."

1. "Bank Street Writer" (48K version) by Scholastic Inc.
2. "Bank Street Writer" (Enhanced 64K version) by Scholastic Inc.
3. "It's Mathematics 4" by Gage Publishing.
4. "Prelab Studies Part 1: General Chemistry" by John Wiley & Sons.
5. "T. Rex: The Dinosaur Survival Adventure" by Mindscape Inc.
6. "Writing Activities and Language Skill Builders" by Scholastic Inc.
7. "Writing Skills Bank" by Scholastic Inc.

OTHER EVALUATION SOURCES

PRINT SOURCES

Many other agencies in Canada and the United States are evaluating microcomputer software and providing valuable information. A list of some of the software evaluation sources is provided for your information.

TITLE: Apple K-12 Curriculum Software Reference Guides

DESCRIPTION: A series of publications matching curriculum objectives to high quality software specific to the Apple family of computers for teachers working in science (K-12), language arts (K-6, 6-12) and mathematics (K-6, 6-12). Guides for other curriculum (e.g., social studies) areas are under development.

PRICE: $29.00 per publication
$135.00 for all five guides listed above

TO ORDER OR FOR MORE INFORMATION CONTACT: Apple Education Dealers

---

TITLE: Only the Best: The Discriminating Software Guide for Preschool - Grade 12, The 1989 Edition

DESCRIPTION: This publication reports on the newest education software winners - programs that have received a consensus on excellence by the 30 agencies evaluating software.

PRICE: $24.95 (US) prepaid
$26.95 (US) if billing is required

TO ORDER OR FOR MORE INFORMATION CONTACT:
Education News Service
P.O. Box 1789
Carmichael, CA 95609
Phone: (916) 488-4623

TITLE: The 1988-1989 Educational Software Preview Guide

DESCRIPTION: This publication lists software that has been reviewed by a consortium of 27 private and or nonprofit agencies. Over 600 software programs are listed.

PRICE: $8.00 (US) prepaid
$10.50 (US) if billing is required

TO ORDER OR FOR MORE INFORMATION CONTACT:
International Council for Computers in Education (ICCE)
University of Oregon
1787 Agate Street
Eugene, OR 97403-9905
Phone: (503) 686-4414

TITLE: The Educational Software Selector (TESS)

DESCRIPTION: A publication with over 7000 review citations in the 1986-87 TESS and over 3000 listings in the 1988 supplement. These include computer configuration, grade levels, publisher information and price.

PRICE: $35.00 plus $7.00 shipping and handling (US) for 1986-87 TESS
$32.95 plus $5.00 shipping and handling (US) for 1988 supplement only

TO ORDER OR FOR MORE INFORMATION CONTACT:
EPIE Institute
P.O. Box 839
Water Mill, NY 11976
Phone: (516) 283-4922

TITLE: MicroSIFT

DESCRIPTION: MicroSIFT distributes reports on software for applications in curriculum areas (e.g., word processors for language arts, second languages, keyboarding, databases for science, mathematical function plotters).

PRICE: Prices range from $3.00 to $9.00 (US) per report

TO ORDER OR FOR MORE INFORMATION CONTACT:
MicroSIFT
Northwest Regional Educational Laboratory
101 SW Main Street, Suite 500
Portland, OR 97204
Phone: (503) 275-9500

TITLE: CMEC Database for Educational Software, Software Catalogue

DESCRIPTION: These catalogues are derived from the CMEC database. Information on each software package includes: title, publisher, description, evaluation, computer formats, recommended age levels and price. Catalogues are available for the following areas: Administration and Utilities, Business and Finance, Cognitive Processes, Computer Science, Language Arts, Language Arts: 1988 Supplement, Life Sciences, Mathematics, Mathematics: 1988 Supplement, Physical Science and Thesaurus.

PRICE: $6.00 (1989) for Business and Finance and the Cognitive Processes catalogues
$8.00 (1989) for the other catalogues.

TO ORDER OR FOR MORE INFORMATION CONTACT:
SDM
1685, rue Fleury Est
Montreal, QC
H2C 1T1

ELECTRONIC DATABASES

Name:	COUNCIL OF MINISTERS OF EDUCATION
Producer:	Council of Ministers of Education, Canada 252 Bloor Street West Toronto, Ontario M5S 1V5
Started:	1986
Number of Records:	2000
Update Frequency:	Every 3 months
Annual File Size Increase:	250
Cost:	
Rate per hour:	None
On-line per citation cost:	None
Off-line per citation cost:	None
User fee per hour:	None
Telecommunications fee per hour:	$28.00 includes rate per hour
Contact:	Ms. Sue Ewing Database Manager 252 Bloor Street West Toronto, Ontario M5S 1V5 Phone: (416) 964-2551

Description:

The Database for Educational Software, developed by the Council of Ministers of Education, Canada (CMEC), provides educators with descriptive and evaluative information on microcomputer software currently available in Canada. Provincial and territorial ministries and departments of education are contributing descriptions and evaluations of educational courseware for inclusion in the database. Each record in the database contains details such as the title of the software, its intended use, appropriate age levels, availability and price, an abstract, subject descriptors and an extensive evaluation of the software. The evaluations are based on a standard set of evaluation criteria established by representatives from all the provincial and territorial ministries departments of education.

The CMEC database is available online in either English or French through the facilities of La Centrale des bibliothèques in Montreal. Any user equipped with a terminal or a microcomputer, a modem, communications software and telephone lines can access the database online.

ELECTRONIC DATABASES (continued)

Name:	YORK ON-LINE SERVICE
Producer:	Faculty of Education York University North York, Ontario M3J 1P3
Started:	1985
Number of Records:	12,000
Update Frequency:	Regularly Ongoing (twice per month approx.)
Cost:	
Rate per hour:	None
Online per citation cost:	None
Offline per citation cost:	None
User fee per hour:	None
Telecommunications fee per hour:	Toll free access anywhere in Canada (using Datapac)
Contact:	Ronald D. Owston, Director Centre for the Studies of Computers in Education Faculty of Education York University North York, Ontario M3J 1P3 Phone: (416) 736-5019

Description:

A comprehensive catalogue of commercially available educational software containing product descriptions and evaluations. All subject areas from kindergarten through postsecondary as well as teacher utility packages are included.

Also, the service has a database of more than 700 software producers and an electronic bulletin board to allow educators to exchange information about software. Both databases allow full text searches.

Name:	RESOURCE IN COMPUTER EDUCATION (RICE)
Producer:	Northwest Regional Education Laboratory 101 SW Main Street, Suite 500 Portland, OR 97204 Phone: (503) 275-9628
Started:	1979
Number of Records:	5500
Update Frequency:	Bimonthly
Cost:	$15.00 (US) per inhouse search

Description:

This is a directory of microcomputer educational software including producer contact information, prices and abstracts. This database is no longer available in an online format. Requests for information on courseware are answered through an inhouse search at the cost listed above. Requests are accepted by mail or by phone (between 9:00 a.m. and 12:00 noon Pacific Standard Time). Each search request must be accompanied by a purchase order, purchase order number or cheque; no cash please. The search results will be returned by mail within one week of the request. Information flyers, including order forms, are available from the address listed above.